

Before the
UNITED STATES COPYRIGHT ROYALTY BOARD
Library of Congress
Washington, D.C.

 ORIGINAL

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In Re: : Docket No.
: 15-CRB-0001-WR
Determination of Royalty : (2016-2020)
Rates and Terms for :
Ephemeral Recording and : Volume 22
Digital Performance of : Pages 5950 - 6253
Sound Recordings (Web IV) :
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RESTRICTED MATERIAL REDACTED
PURSUANT TO PROTECTIVE ORDER

DAY 22

Washington, D.C.

Wednesday, May 27, 2015

The hearing in the above-entitled
matter was convened at 9:10 a.m.

BEFORE COPYRIGHT ROYALTY JUDGES:

SUZANNE M. BARNETT, CHIEF JUDGE

DAVID R. STRICKLER, JUDGE

JESSE FEDER, JUDGE

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3 WITNESS DIR CROSS REDIRECT

4 DAVID BLACKBURN, PH.D.

5 By Mr. Miller 5960

6 By Ms. Ablin 5995

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8 ERIC L. TALLEY, PH.D.

9 BY Mr. Blavin 6009 6118

10 By Mr. Ebin 6080

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12 SIMON FLEMING-WOOD

13 By Mr. Larson 6121 6204

14 By Mr. Klaus 6145

15

16 DAVID PAKMAN

17 By Mr. Miller 6207

18 By Mr. Klaus 6235

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1 P R O C E E D I N G S

2 (PUBLIC SESSION)

3 CHIEF JUDGE BARNETT: Good morning.

4 Please be seated.

5 We have held you in suspense for long
6 enough. So this morning, Judge Strickler will
7 deliver the ruling with regard to the Danaher
8 testimony, and Judge Feder will deliver the ruling
9 with regard to the after payments.

10 JUDGE STRICKLER: Good morning.

11 IHeart had moved to exclude from
12 evidence Professor Danaher's written expert
13 testimony that had been withdrawn, and iHeart's
14 motion to exclude is granted. This is an expert
15 witness who was withdrawn. The briefs demonstrate
16 that the authority is split with regard to whether
17 or not such testimony can be admitted.

18 On balance, we find the authority is
19 better to construe such a witness as a consulting
20 witness rather than as a testifying witness, and,
21 in addition, the data that was underlying that
22 testimony has been utilized and examined by other
23 witnesses and there has been cross-examination and
24 the opportunity for cross-examination to cover the
25 underlying substance of what was covered by

1 Professor Danaher. So for those reasons, his
2 written testimony is excluded.

3 JUDGE FEDER: Regarding SoundExchange's
4 request to permit witnesses from Sony and Warner
5 to address preexecution projection models that the
6 labels created in approving the Apple iTunes Radio
7 agreements and regarding amendments to the cloud
8 service agreements, that motion is also denied.
9 We view this as new data and new analysis, and, in
10 accordance with our prior rulings on that subject,
11 we will not permit that.

12 CHIEF JUDGE BARNETT: Cross-examination
13 for Professor Blackburn at this point, or
14 Dr. Blackburn?

15 MR. MILLER: Yes, Your Honor. And a
16 couple of housekeeping matters.

17 You have, of course, binders in front of
18 you. It wouldn't be a day at the CRB without
19 them.

20 I did inform counsel, I think, that
21 we'll have to begin this session in restricted,
22 but I imagine that will be fairly limited, and
23 then we can move into unrestricted for the
24 balance.

25 CHIEF JUDGE BARNETT: Okay. So we're

1 going to begin the morning by kicking you out if
2 you have not signed the nondisclosure agreement.

3 (THIS ENDS PUBLIC SESSION)

4 (RESTRICTED SESSION BOUND SEPARATELY)

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11 (END OF RESTRICTED SESSION)

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1 (THIS BEGINS PUBLIC SESSION)

2 BY MR. MILLER:

3 Q In section 5 of your written rebuttal
4 testimony, you opine that interactive and
5 noninteractive services have the same
6 promotional/substitutional impact on the industry?

7 A Yes, I think that's right, that's
8 what -- the data suggests that there's no
9 identifiable difference.

10 Q If I could ask you to turn to paragraph
11 42 on SX 24-028.

12 A Okay.

13 Q Are you with me?

14 A I am.

15 Q In reference here to the table 2 above,
16 you say that the column B here shows the average
17 change in the number of tracks purchased by users
18 who adopt a streaming service in the second
19 period, and it goes on from there to say is not
20 significantly different from zero. Do you see
21 that?

22 A I do.

23 Q From a statistical perspective, the best
24 estimate you have of the effect on song downloads
25 being a noninteractive value is the point estimate

1 here in table 2, right?

2 A Yes. I mean, I guess if you put a gun
3 to my head and said you have to pick a number,
4 that's the best estimate, but I think the
5 statistical testing suggests that you shouldn't
6 believe very strongly in that number as opposed
7 to -- as opposed to zero, for example.

8 MR. MILLER: If we could pull up the
9 table 2 on the screen. We may try to blow this up
10 a little.

11 Q Yesterday you showed part of it. You
12 showed the column C in the demonstrative. But
13 this is the full table, correct?

14 A That's correct.

15 Q You would agree that the point estimate
16 in your table 2 analysis for the noninteractive
17 users in period 2, in column B, is positive.

18 Steve, can you make sure we show them
19 what column B is here. There we go.

20 So the point estimate in column B for
21 the noninteractive users is positive, correct?

22 A I agree that's a positive number. I
23 don't agree it's right to look at column B instead
24 of column C.

25 Q We'll talk about B, and then I'll have

1 questions about C as well.

2 A It is a positive number.

3 Q Specifically, the average change
4 presented in column B -- we may need to highlight
5 this, Steve -- in the number of tracks purchased
6 by noninteractive users who adopt a streaming
7 service in the second period is 5.123?

8 A Or that's if you -- if you restrict the
9 analysis only to people who actually purchase
10 music after they started adopting, that's correct.

11 Q So for that group of users, that means,
12 according to your analysis, that those
13 noninteractive users presented in column B, on
14 average, purchased 5.123 more downloads -- more
15 song downloads in period 2; is that correct?

16 A That's the interpretation, yes.

17 Q And period 2, just for clarity, is the
18 three-month period after which a user started
19 using a noninteractive streaming service like
20 Pandora or iHeart, correct?

21 A So I think it's the three -- it's the
22 second three months of the data set. At some
23 point during those three months they started
24 using.

25 Q So just to be clear, according to your

1 analysis, a noninteractive user presented in
2 column B, on average, purchased approximately five
3 more song downloads during the three-month period
4 after which the user started using a streaming
5 service like Pandora or iHeart?

6 A So that's not strictly correct. That's
7 among -- that's only looking at the subset of
8 users who purchased music at some point, and as I
9 note in my written testimony here, that's an
10 inappropriate restriction that I did only to be
11 consistent with what Professor Danaher did, and it
12 suffers from the same flaws that excluding the
13 zero sales that Dr. McBride did does. And you can
14 see in column C that when you actually account for
15 the people who aren't affected, which is
16 important, the average effect is a much smaller
17 number, yet still statistically indistinguishable
18 from zero.

19 Q But still positive.

20 A It is a positive number, that is
21 correct.

22 Q By contrast, the point estimate in your
23 table 2 analysis on an interactive user in
24 period 2 in column B -- column B for now -- is
25 negative, right? It's a negative 3.383?

1 A I mean, again, it's a negative number.

2 If the question is, does it have a minus sign in
3 front of it, it does.

4 Q Right.

5 So the average change in the number of
6 tracks purchased by an interactive user who
7 adopted a streaming service in the second period
8 is negative 3.383, correct?

9 A Again, restricting it inappropriately
10 only to the people who actually purchase music and
11 ignoring all the people who are not affected, you
12 get negative 3.383.

13 JUDGE STRICKLER: If we look at your
14 column C, which includes those who were not
15 affected at all --

16 THE WITNESS: Yes, sir.

17 JUDGE STRICKLER: -- so you have for the
18 noninteractive user, period 2, .624 --

19 THE WITNESS: Yes.

20 JUDGE STRICKLER: -- for the three-month
21 period, and for the interactive users, .493,
22 right?

23 THE WITNESS: That's correct.

24 JUDGE STRICKLER: So does that
25 demonstrate a promotional effect for

1 noninteractive users relative to interactive users
2 but very, very mild, on the order of, net, about
3 one every three months?

4 THE WITNESS: So I talked about this a
5 little bit yesterday. So that's the point
6 estimate that you get, but the standard error is
7 sufficiently high on that, that the p-value is
8 like .35, so it's something that -- you know,
9 without going into all the details of hypothesis
10 testing and teaching a statistics class, what that
11 means is if it were true that there were no
12 difference, you would see something like that. If
13 it was true that there was actually no difference,
14 right, we could set up a world where we knew for
15 certainty that there was no difference, and then
16 let the world evolve and pull out the data like we
17 had and then analyze it, just by random chance,
18 you would see something like that fairly often,
19 35 percent of the time. That's why statisticians
20 or econometricians look at something like that and
21 say that's really not sufficient evidence to tell
22 me that there is anything different about those
23 two effects.

24 JUDGE STRICKLER: It would occur by
25 random chance 35 percent of the time.

1 THE WITNESS: That's correct.

2 JUDGE STRICKLER: So it would occur,
3 therefore, not by random chance, 65 percent of the
4 time, which from a statistician or
5 econometrician's point of view, that would clearly
6 not be sufficient to prove the hypothesis?

7 THE WITNESS: So I'm not entirely sure
8 that you would then say 65 percent of the time --
9 so 65 percent of the time you would see something
10 less, you would see less of a difference than
11 that, and 35 percent of the time you would see a
12 difference that big or greater. And then,
13 correct, as you said, from a statistician's point
14 of view or from an econometrician's point of
15 view -- I mean, there's no econometrician or
16 statistician who would look at a p-value of .35
17 and say that that proves -- that that's any
18 evidence that there's any difference between those
19 things.

20 JUDGE STRICKLER: Would you say, as an
21 econometrician, that it's more probable than not
22 that it shows a mild effect that's promotional for
23 noninteractive versus interactive.

24 THE WITNESS: I wouldn't say that. I
25 think that's inappropriate. I've seen -- in other

1 situations, I've seen economists say, well, the
2 p-value is less than .5 and that means it's more
3 probable than not. But I think that's a
4 misinterpretation of what p-values are.

5 The hypothesis is are these things
6 equal, and the p-value says if they were not
7 equal, this is how often, what percentage of the
8 time you would see something like this just due to
9 random chance. So, to me, I see this, and the
10 p-value is high enough that it's just -- you know,
11 it's just not evidence that there's a difference.
12 I don't think you could look at it and say that
13 it's more probable than not that there is a
14 difference.

15 JUDGE STRICKLER: I understand that.
16 That leads me to another question I wanted to ask
17 you. It goes back to your critique and your
18 figure 6, which basically is a matter of showing
19 correlation and no causation whatsoever, which I
20 think counsel is trying to explore with you on
21 cross-examination.

22 THE WITNESS: Sorry, I don't know what
23 figure 6 is.

24 JUDGE STRICKLER: I'm sorry, figure 6 on
25 page 18.

1 THE WITNESS: Oh, yes, okay.

2 JUDGE STRICKLER: Because you didn't
3 control for any other factors, as you candidly
4 acknowledge. You just saw a correlation
5 between -- or, actually, perhaps I would say lack
6 of the correlation that was being advanced by
7 Professor Kendall.

8 THE WITNESS: So I wouldn't say that it
9 is just correlation. I mean, there is a natural
10 experiment going on here where, for reasons that
11 have nothing to do with consumers' preferences for
12 music and desire to purchase music, there's a
13 change in how often a song is being played. It's
14 true that there are other -- potentially other
15 changes going on in the market. So there's always
16 additional things in any analysis that you could
17 include. But I would object to the idea that it's
18 just causation -- that it's just correlation.
19 There is a natural experiment going on.

20 JUDGE STRICKLER: As an econometrician,
21 what is your level of statistical confidence with
22 regard to your conclusions from that natural
23 experiment in figure 6?

24 THE WITNESS: So I'm confident that -- I
25 don't have a p-value on this, right?

1 JUDGE STRICKLER: Why not?

2 THE WITNESS: I don't know, I didn't
3 calculate one. If I tested whether these things
4 are the same, I can say with strong confidence --
5 I can't give you the p-value -- that they're not
6 higher, right? We may be able to find that they
7 were lower, but they're not higher.

8 JUDGE STRICKLER: More probable than
9 not?

10 THE WITNESS: Looking at it and looking
11 at the table 1, I think it's pretty clear that
12 they're not higher.

13 JUDGE STRICKLER: So it's more probable
14 than not that they're not higher?

15 THE WITNESS: I think it's a fact
16 they're not higher. That's just a fact. That's
17 not something that's open to probability. I guess
18 the question that's open to interpretation is what
19 that means. I think it's a fact that they didn't
20 go up.

21 JUDGE STRICKLER: So you say it's --
22 because of that, it's more probable than not that
23 there was no promotional effect?

24 THE WITNESS: I would say that it's
25 evidence -- it's just further lack of evidence of

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1 a promotional effect. That's maybe just
2 semantics, but I think the point is this is -- and
3 we talked a little bit about this in my direct,
4 right? It's sort of hard to prove a negative,
5 right? So what you could do is look at places
6 where you would say, well, if this is true, this
7 is what we would expect to see, and we look at it,
8 and we don't see it.

9 And this is another example of if there
10 was a promotional effect after there's a big boost
11 in plays on iHeart, well, you would expect to see
12 some bump in sales, and, again, you don't see it.
13 So I would say it's evidence of a lack of
14 evidence, if that makes any sense.

15 JUDGE STRICKLER: I understand. If you
16 had tried to control for the other factors as
17 counsel had questioned you about a moment ago,
18 would you then have been able to establish a level
19 of statistical confidence?

20 THE WITNESS: I don't think that makes a
21 difference. I think --

22 JUDGE STRICKLER: With all due
23 respect --

24 THE WITNESS: Sorry --

25 JUDGE STRICKLER: -- that wasn't my

1 question.

2 THE WITNESS: No, no, sorry, I --

3 JUDGE STRICKLER: My question is would
4 you have been able to calculate a level of
5 confidence if you had controlled for all the other
6 facts that you mean to control?

7 THE WITNESS: Sorry, what I meant to say
8 is it doesn't make a difference whether or not you
9 calculated it. I was trying to answer your
10 question. My apologies.

11 JUDGE STRICKLER: That's okay.

12 THE WITNESS: It just wasn't calculated.
13 You could calculate the -- the numbers are here.
14 You could calculate a p-value on a test of whether
15 the 20 percent is the same as the six numbers that
16 come later or whether the 201,000 is different
17 from the 183,000. So the reason it was done is
18 not because -- the reason it was presented this
19 way and I didn't calculate a p-value on these is
20 not because of not accounting for any of the
21 things that I was asked about, if that makes any
22 sense.

23 JUDGE STRICKLER: Thank you.

24 THE WITNESS: You're welcome.

25

1 BY MR. MILLER:

2 Q I actually will have a couple questions
3 on the p-values, as exciting as that is.

4 A I'm sure it's everybody's favorite
5 subject.

6 Q But if I could finish up a couple
7 questions on the table 2 here. It's fair to say
8 that for the tests that you performed, for either
9 user group, it's true that, on average,
10 noninteractive users increase their purchase --
11 purchases of song downloads more than interactive
12 users did in the three-month period after they
13 started using a webcasting service, right?

14 A The point estimates in the
15 noninteractive row are higher than the point
16 estimates in the interactive row, that's correct.

17 Q So is that a yes?

18 A On average, without accounting for the
19 variability, yes.

20 Q Now, you were having a discussion with
21 Judge Strickler about the confidence levels or the
22 .35 p-value. What you were testing, you noted in
23 paragraph 43, was a hypothesis that the effect of
24 using noninteractive streaming services on
25 purchases of digital tracks is the same as the

1 effect of adopting use of an interactive service,
2 correct?

3 A That's correct.

4 Q So you're trying to test whether they
5 had the same effect, correct?

6 A Right. I'm testing whether -- I mean, I
7 would say you're testing whether there's a
8 difference. Strictly how you do that in
9 hypothesis testing is you say, let's suppose there
10 is not a difference and then do we see something
11 that is consistent with that or not.

12 Q And for the users in group B, you came
13 up with a p-value of .268, correct?

14 A That's correct.

15 Q So that means that you have a 73 percent
16 level of confidence that the hypothesis is
17 actually unproved, correct?

18 A I don't think I would express it that
19 way. I think a p-value of .268, people often say,
20 well, there's a confidence of 1 minus that many
21 percentages. But what it means is that, again, if
22 the hypothesis that they were the same is true,
23 you would see something that extreme 26.8 percent
24 of the time just due to random chance.

25 Q In fact, you used the term 73 percent

1 confidence, was the only reason I was using it,
2 there in footnote 53, I believe.

3 A Right, that's what it says there. It
4 corresponds to a quote unquote, and I put quotes
5 on it because it's a little weird to say
6 73 percent confidence. But, exactly, the p-value
7 of X corresponds to a confidence level of 1 minus
8 X.

9 Q Given that you found an actual
10 difference that we talked about between the
11 promotional effects of interactive and
12 noninteractive services based on the point values
13 you observed, how much confidence do you have in
14 the hypothesis that there is no difference?

15 A I mean, I have as much confidence as you
16 can get after running a test and failing to reject
17 it. There's no -- statistical testing doesn't
18 work in such a way that there is a percentage that
19 you can put on that. As I said before, what it
20 tells you is this is something that wouldn't be
21 uncommon to see if the hypothesis were true. So
22 what -- I look at this and say, if the hypothesis
23 is true, this is something we would see so there's
24 no evidence here to tell me that the hypothesis is
25 false.

1 Q Well, you would agree, would you not,
2 that the analysis you performed certainly did not
3 support the conclusion that use of noninteractive
4 services leads to substitution of song downloads,
5 correct?

6 A So I would say it's not inconsistent
7 with that because we have to keep in mind that all
8 these numbers are biased upwards for the reasons I
9 talked about yesterday.

10 Q But either of the analyses that you
11 performed for B or C resulted in fewer song
12 downloads after someone started the use of the
13 noninteractive streaming service, correct?

14 A That's correct.

15 JUDGE STRICKLER: I have a question for
16 you, Dr. Blackburn. If we utilize all music
17 stream as your column C --

18 THE WITNESS: Yes, sir.

19 JUDGE STRICKLER: Do your confidence
20 levels still apply to that now that you've changed
21 the sample to include those who are not buying any
22 music at all?

23 THE WITNESS: So the 26.8 p-value for
24 the difference is for column B, and there's a .35
25 p-value, which I think is in paragraph 45, for --

1 if you look at column C.

2 JUDGE STRICKLER: Thank you.

3 BY MR. MILLER:

4 Q I guess just one question to wrap this
5 up. So the econometric analysis you performed on
6 iHeartMedia's produced data showed that it was
7 more likely than not that the use of
8 noninteractive services had no substitutional
9 effect, correct?

10 A Sorry, can you ask that again.

11 Q Had no substitutional effect.

12 A The use of?

13 Q Noninteractive -- I'll ask it again.

14 A Sorry. That's okay, thank you.

15 Q The econometric analysis that you
16 performed on the data produced by iHeart showed
17 that it was more likely than not that the use of
18 noninteractive services had no substitutional
19 effect, correct?

20 A I mean, I don't know about more likely
21 or not. It's consistent with it having neither a
22 substitutional nor a promotional effect, yes.

23 Q You could not say there was any
24 statistically significant evidence that
25 noninteractive services substitute for digital

1 sales, correct?

2 A That's correct, the analysis is
3 indistinguishable from -- there's no statistical
4 evidence that it's -- again, strictly talking
5 about digital downloads and ignoring all the other
6 revenue channels, because that's all the data
7 does, the evidence suggests -- there's no
8 statistical evidence of a promotional effect or a
9 substitutional effect from noninteractive services
10 or interactive services or any difference between
11 them.

12 MR. MILLER: No further questions.

13 THE WITNESS: Thank you.

14 CHIEF JUDGE BARNETT: Good morning.

15 MS. ABLIN: Good morning, Your Honor.

16 CROSS-EXAMINATION BY COUNSEL FOR NATIONAL
17 ASSOCIATION OF BROADCASTERS

18 BY MS. ABLIN:

19 Q Good morning, Dr. Blackburn.

20 A Good morning.

21 Q I would like to start by discussing a
22 section of your testimony you didn't talk about
23 yesterday but you did talk about when you were
24 deposed a few weeks ago.

25 A Okay.

1 Q If I could get you to turn to
2 paragraph 61, which is on page 37 of your rebuttal
3 testimony.

4 CHIEF JUDGE BARNETT: Ms. Ablin, can I
5 ask which hat you're wearing today?

6 MS. ABLIN: Certainly, Your Honor. So
7 we've met before. I'm Karyn Ablin. I'm
8 representing the National Association of
9 Broadcasters.

10 CHIEF JUDGE BARNETT: Thank you.

11 A Paragraph 61, yes.

12 Q Yes. Now, you've asserted in that
13 paragraph that "The threat of losing potentially
14 paying customers to nonpaying illegal services
15 would cause rational negotiators for the directly
16 licensed services to demand lower royalty rates
17 and would cause rational negotiators for the
18 record companies to accept lower rates than
19 otherwise would be the case absent piracy"; is
20 that right?

21 A That's correct.

22 Q And in making that statement, you did
23 not attempt to quantify the effect of piracy on
24 the rates that are negotiated between the licensed
25 services and the labels, did you?

1 A That's correct, it's not a
2 quantification exercise.

3 Q You also didn't calculate
4 cross-elasticities of demand between unauthorized
5 pirated services and licensed services, did you?

6 A No, that would be -- if I had done that,
7 the answer to the previous question would have
8 changed. That's a quantitative exercise.

9 Q In preparing your testimony, you did not
10 analyze whether the presence of piracy affects how
11 a surplus in the service gets divided between a
12 service and a record company in a license
13 negotiation, did you?

14 A That's correct, yes.

15 Q And you wouldn't be comfortable saying
16 that piracy would move the division of surplus
17 between the record label and the licensed service
18 one way or another or not move it at all, correct?

19 A That's correct. I'm comfortable in
20 saying that the rates are lower as a result, but
21 not whether whatever surplus there is, is being
22 split differently.

23 Q If you could please turn now to
24 paragraph 23, which is on page 15 of your
25 testimony.

1 A Okay.

2 Q You state there that "A review of the
3 aggregate revenue trends in the music industry
4 over the past several years suggest that streaming
5 services are more than simply neutral in their net
6 promotion and substitution impact. The trends
7 suggest streaming services substitute for other
8 industry revenue sources."

9 Do you see that?

10 A It says that, yes.

11 Q And then you go on in that section to
12 present figures 2 through 5, which show various
13 types of trends related to streaming plotted
14 against overall recording industry sales; is that
15 correct?

16 A Right. And they're similar to the
17 charts that I talked about here a few weeks ago.

18 Q Let's take a look at one of those
19 figures, figure 4, which is on page 17 of your
20 rebuttal testimony.

21 A Uh-hmm.

22 Q Now, that figure provides a visual
23 comparison of the amount of revenues from
24 streaming services in general with the amount of
25 total recording industry sales for each year from

1 2004 to 2013, correct?

2 A It does.

3 Q And you intended that figure to be a
4 fair visual depiction of these revenue trends,
5 correct?

6 A I mean, I don't know what fair means,
7 but it's -- it's intended to show the trends, yes.

8 Q You didn't intend to mislead anyone in
9 the way that this data was presented.

10 A Absolutely not.

11 Q But in presenting this comparison, you
12 have used very different scales to plot the
13 streaming revenues and the total industry sales
14 revenues, correct?

15 A Well, you have to do that because if you
16 have the same scale, you can't see the trends.
17 You can just see the levels.

18 Q And, in fact, the scale varies -- they
19 vary by a factor of 4, don't they?

20 A That seems to be right, yes.

21 Q So you said you had to do that to make
22 sure you could see the trend in the streaming
23 revenues? Is that what your testimony is?

24 A Yes, I think that's right. If you put
25 the streaming revenues on the same scale, the

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1 left-hand side, that the total sales are,
2 streaming is still a relatively small part of
3 total industry revenues. It's growing, as you can
4 see here. But I certainly don't -- I certainly
5 don't intend anybody to look at this and say, ah,
6 total streaming revenues are now as high as
7 digital and physical revenues were in 2013. It's
8 just -- it's about one fourth the size.

9 Q Right. And by using these different
10 scales for the two sets of revenues, it gives the
11 appearance that the decline, just looking at the
12 bars as they're presented in this chart, it gives
13 the appearance that the decline of industry
14 revenues and the growth of streaming revenues are
15 more closely correlated than they are; is that
16 correct?

17 A I mean, I don't think it changes the
18 correlation. The correlation is not subject to --
19 I mean, a correlation isn't subject to scale.

20 Q Right. I'm just talking about the
21 visual appearance. Someone looking at this chart,
22 it gives the visual appearance that there's a
23 higher correlation than there actually is if
24 they're not paying attention to the two different
25 scales.

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1 A I mean, I take it that maybe that's
2 possible. I don't see that. It may be because I
3 have spent years studying statistics and
4 econometrics and stuff like that, but it may be
5 possible.

6 Q Let's take a look at an exhibit I'm
7 about to hand out --

8 A Sure.

9 Q -- which has been marked NAB 4236.

10 MR. CHOUDHURY: Your Honor, we object.
11 This is clearly a demonstrative that's never been
12 disclosed. There were no demonstratives or
13 exhibits disclosed for this witness from NAB, and,
14 clearly, they've done something with the data
15 which, you know, I can't know sitting here.

16 MS. ABLIN: Your Honor, this is simply
17 an impeachment demonstrative to impeach the
18 reliability and misleading nature of
19 Dr. Blackburn's figure 4 in his testimony. We're
20 not required to disclose impeachment
21 demonstratives, and I will represent to the Court
22 that this demonstrative was created using --
23 without doing new analyses of data. It was simply
24 the data and the Excel charts that we received in
25 discovery from SoundExchange related to

1 Dr. Blackburn's testimony.

2 CHIEF JUDGE BARNETT: Anything further,
3 Mr. Choudhury?

4 MR. CHOUDHURY: No.

5 CHIEF JUDGE BARNETT: The objection is
6 overruled. 4236 is admitted as a demonstrative.

7 (NAB Exhibit 4236 was admitted into
8 evidence.)

9 BY MS. ABLIN:

10 Q Dr. Blackburn, does this figure in
11 NAB 4236 appear to show what your figure 4 would
12 look like if the same vertical scale had been used
13 for both streaming revenues and recording industry
14 sales?

15 A I mean, taking your representation that
16 it uses the same underlying numbers that figure 4
17 does, I think so, yes.

18 JUDGE STRICKLER: I have a question for
19 you related to this and going to your figure 4,
20 which you probably have open in front of you.

21 The left-hand axis is -- you use the
22 phrase "total sales." On the right-hand axis, you
23 use "streaming revenue." Is there a reason why
24 you didn't also say just "total revenue" as
25 opposed to "total sales" on the left-hand axis?

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1 THE WITNESS: They're the same thing. I
2 don't know why, at this point, why one says
3 "sales" and one says "revenue." It may be because
4 the revenue that comes in for streaming is not
5 sales revenue, it's licensing revenue.

6 JUDGE STRICKLER: I could understand why
7 that one would be revenue. But you had a choice,
8 I think, correct me if I'm wrong, calling the
9 left-hand axis "total revenues" instead of "total
10 sales."

11 THE WITNESS: Yes, that's correct. I
12 think it's -- honestly, I do not remember why. My
13 guess is it's because those are revenues from
14 sales and the other ones are revenues that aren't
15 from sales, just to make to distinction, but, to
16 be honest, I'm not certain about that.

17 JUDGE STRICKLER: Thank you.

18 BY MS. ABLIN:

19 Q Dr. Blackburn, I think you testified
20 earlier, was it your idea to use two different
21 scales in plotting these two trends of revenues in
22 figure 4?

23 A I mean, it's my report. Everything in
24 there is my ideas, yes.

25 Q So it was your decision to do this.

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1 A Yes.

2 Q And figure 4 alone does not show that
3 increased streaming revenues to the recording
4 industry has caused the decline in overall
5 recording industry revenues, does it?

6 A I mean, we've talked about that at
7 length a couple weeks ago. It's -- this is not a
8 causal analysis. It's just showing that while one
9 is going up and one continues to grow, while
10 streaming is growing, total sales are falling.

11 Q Let's take a look now at figure 5 in
12 your testimony. That's on page 18.

13 A Okay.

14 Q In presenting -- well, that figure
15 provides a visual comparison of the amount of
16 statutory royalties that SoundExchange distributed
17 with the amount of total recording industry sales
18 for each year from 2004 to 2013, correct?

19 A That's correct.

20 Q And in presenting this comparison,
21 you've actually decided to inflate the scale for
22 graphing SoundExchange's statutory royalty
23 distributions, as compared with total recording
24 industry sales amounts, by a factor of 10. Is
25 that correct?

1 A The scale on the left-hand side is ten
2 times the scale on the right-hand side, yes.

3 Q I'm going to hand out another exhibit
4 for us to look at.

5 MR. CHOUDHURY: Your Honor, just for the
6 record, as long as it's being used solely for
7 impeachment. I would also note that I believe
8 these are also new to the exhibit list after the
9 start of the hearing.

10 CHIEF JUDGE BARNETT: They are marked
11 with new numbers. I think usually what happens is
12 these things appear and then later we assign them
13 a number. But 4237 is admitted for demonstrative
14 purposes only.

15 (NAB Exhibit 4237 was admitted into
16 evidence.)

17 MS. ABLIN: Thank you.

18 BY MS. ABLIN:

19 Q Dr. Blackburn, you've now been handed an
20 exhibit that's been marked as NAB Exhibit 4327.
21 Do you see that?

22 A I do.

23 Q Does this figure show what your figure 5
24 would look like if the same vertical scale had
25 been used for both SoundExchange distributions and

1 recording industry sales?

2 A I mean, I don't know. If you're willing
3 to make the same representation, then I could
4 answer the question.

5 Q Yes. I'm happy to represent that this
6 chart was created from the same data that we
7 received in discovery from your counsel that had
8 been used as backup for the chart in your
9 testimony.

10 A Right. So as long as the data are the
11 same, then that appears to be the case, yes.

12 Q And was it also your idea to plot the
13 two types of revenues in this chart using two
14 different scales?

15 A Yes, it was. I think here you can
16 really see what I was talking about before. If
17 you look at 2005, 2006, 2007, the scale is -- the
18 scale for the SoundExchange distribution is just
19 too wide that you can't really -- can't even tell
20 whether there's any change between 2005 and 2006,
21 but you can see a little bit better on the other
22 one. Maybe you should even use a bigger scale
23 because you're only using -- even in my figure 5
24 you're only using half of the vertical space to
25 show what's going on in SoundExchange.

1 And I'll note, because, you know, you
2 asked about this being misleading, if you read the
3 text around this, it talks about the specific
4 numbers. And the end of paragraph 24 even
5 explicitly says that the increase of about
6 300 million in distributions over a time period is
7 only about one third the approximately 900 million
8 dollar drop in sales over that time.

9 So, I mean, I hope that it's clear from
10 stuff like this I am not trying to mislead
11 anybody. I am doing this just because visually,
12 in order to see what's going on, you want to use
13 the visual space, and the scale is different
14 enough that, in my opinion, it warrants using
15 different scales for the different data, but I
16 certainly have no intention of misleading and
17 making anybody look at this chart and think that,
18 say, there's a one-for-one change on one hand for
19 the other.

20 Q But you don't explicitly flag in the
21 text the fact that you've used different scales
22 other than the small print that goes up the right
23 side of this graph, do you? You might mention
24 numbers, but you don't explicitly tell the reader
25 that you're using different scales in the text, do

1 you?

2 A It's on the charts themselves. So if
3 you're looking at the charts and you look at the
4 charts, you can see that it's there. I'm not
5 trying to pull the wool over anybody's eyes.

6 Q Right, but it's not in the text.

7 A It's not in the prose. It's in the
8 written testimony.

9 MS. ABLIN: No further questions.

10 CHIEF JUDGE BARNETT: Any questions,
11 Mr. Malone?

12 MR. MALONE: No, Your Honor.

13 CHIEF JUDGE BARNETT: Is there someone
14 here from Sirius?

15 MR. TOOF: Yes, Your Honor, Jackson
16 Toof.

17 CHIEF JUDGE BARNETT: Any questions for
18 this witness?

19 MR. TOOF: No, Your Honor.

20 MR. CHOUDHURY: No redirect.

21 CHIEF JUDGE BARNETT: Thank you,
22 Mr. Choudhury.

23 Thank you, Dr. Blackburn.

24 THE WITNESS: Thank you. It's been a
25 pleasure.

1 (Witness excused.)

2 - - -

3 ERIC L. TALLEY, Ph.D.,

4 having been duly sworn, testified as follows:

5 CHIEF JUDGE BARNETT: If you could state
6 your full name and spell your last name for the
7 record.

8 THE WITNESS: Yes. Eric L. Talley. The
9 last name is T, as in Tom, A-L-L-E-Y.

10 CHIEF JUDGE BARNETT: Thank you.

11 MR. RICH: Your Honors, on behalf of
12 Pandora, Mr. Ebin will be conducting our
13 cross-examination of Mr. Talley.

14 CHIEF JUDGE BARNETT: Thank you,
15 Mr. Rich.

16 DIRECT EXAMINATION BY COUNSEL FOR SOUNDEXCHANGE
17 BY MR. BLAVIN:

18 Q Professor Talley, where are you
19 currently employed?

20 A I am currently the Rosalinde and Arthur
21 Gilbert Foundation professor of law and economics,
22 in the Law, Business, and the Economy division at
23 UC Berkeley. As of July 1, 2015, I will be moving
24 to a tenured position at Columbia University where
25 I will hold the Sulzbacher professor of law.

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1 Q What is your educational background?

2 A I hold a Ph.D. in economics from
3 Stanford University as well as a law degree from
4 Stanford law school, and a bachelor's degree in
5 economics and political science with a minor in
6 mathematics from the University of California San
7 Diego.

8 Q What courses do you presently teach?

9 A I teach a variety of courses in business
10 law and the economic analysis of law, including a
11 course in law and economics, contracts, mergers
12 and acquisitions, corporate finance, corporations,
13 and a set of sundry topics in business law as
14 well.

15 Q Have you conducted research and
16 published articles in these fields?

17 A Yes, I have.

18 Q You've studied and published articles
19 specifically on bargaining in the shadow of legal
20 regimes?

21 A Yes. The part of my research that
22 concerns bargaining in the shadow of law is
23 actually one of the largest portions of my
24 research dossier.

25 Q Do you presently serve on any boards?

1 A I do. I am an immediate past president
2 and director of the Society for Empirical Legal
3 Studies, which is -- I believe it's the largest
4 empirical legal studies academic society in the
5 world. I'm a past member of the Board of
6 Directors of the American Law and Economics
7 Association as well as program chair of the
8 sections of contracts and law and economics in the
9 Association of American Law Schools.

10 Q Have you testified before as an expert
11 in litigation?

12 A Yes, I have.

13 Q How many times?

14 A Well, I've been probably retained more
15 than two dozen times. I've testified, I believe,
16 four times now.

17 Q And your entire curriculum vitae is
18 attached as an exhibit to your testimony?

19 A Let me just check.

20 Yes, my CV as of November 14, what
21 appears to be a correct copy of it is attached to
22 my written rebuttal testimony.

23 MR. BLAVIN: Your Honors, we tender
24 Professor Talley as an expert in microeconomics,
25 bargaining and game theory, and economic analysis

1 of the law.

2 MR. EBIN: No objection.

3 CHIEF JUDGE BARNETT: Professor Talley
4 is so qualified.

5 BY MR. BLAVIN:

6 Q Professor Talley, is this a true and
7 correct copy of the written rebuttal testimony you
8 submitted in these proceedings?

9 A Just flipping through it, it appears to
10 be. I will not bother to try to reread it, but it
11 appears to be a correct copy.

12 MR. BLAVIN: Your Honor, SoundExchange
13 moves into evidence Professor Talley's written
14 rebuttal testimony, which is SoundExchange 19.

15 MR. EBIN: No objection.

16 CHIEF JUDGE BARNETT: Exhibit 19 is
17 admitted.

18 (SoundExchange Exhibit 19 was admitted
19 into evidence.)

20 BY MR. BLAVIN:

21 Q Professor Talley, does this slide cover
22 your central criticisms of the analytical
23 approaches taken by Professors Katz and Shapiro,
24 as described in your rebuttal testimony?

25 A I think this captures the core of it.

1 There are four modules on the slide that get at
2 most of it. I'll just cover them briefly, and
3 then we can go into them in greater detail.

4 The first concerns what has been called
5 the shadow of the statutory rate and the failure
6 of Professors Katz and Shapiro to account for how
7 that statutory rate can crowd out consensually
8 negotiated deals, leaving behind deals that
9 exhibit downward selection bias in their pricing
10 terms.

11 The second is that Professors Katz and
12 Shapiro ignore or suppress the effects that
13 competition in downstream markets can have on the
14 derived demand, as it were, or demand for inputs
15 of intermediate -- intermediate sellers, such as
16 the services in this case, and constrain their --
17 the upstream prices from getting too high.

18 The third is that Professors Katz and
19 Shapiro employ an approach that is inconsistent,
20 in my view, with the mandate in the statute of
21 what a hypothetical market of willing buyers and
22 willing sellers would produce in terms of prices,
23 and that renders their conclusions unreliable.

24 And the final is that they attempted to
25 distinguish interactive from noninteractive

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1 services in a bargaining dynamic that purportedly,
2 according to Professor Shapiro, particularly, and
3 Katz, to some extent, would differ. I find that
4 unconvincing.

5 Q Now, besides offering these criticisms
6 of Professor Katz and Professor Shapiro, did you
7 do anything else in your written rebuttal
8 testimony?

9 A Yes, I did. I think the next slide
10 outlines that a little bit. I developed, as a way
11 to animate and illustrate and work through those
12 criticisms of Professors Katz and Shapiro
13 something that I guess most economists would call
14 a structural model approach, which is an attempt
15 to drill down to some of the core features of
16 economic transactions in a way that would bear on
17 the types of pricing behavior or other
18 institutional structures we might see from a
19 larger level.

20 Q What were the ingredients of this
21 approach?

22 A That is going to depend on exactly the
23 topic of where one wants to go with the structural
24 approach. In this instance, the structural model
25 was fashioned around trying to glean what a

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1 population of willing buyers and willing sellers
2 would do if transacting in a large decentralized
3 market.

4 So, as a result, the structural model
5 posits a set of heterogeneous distributions of
6 buyers and sellers and they differ in their
7 various willingnesses to pay, by buyers, for what
8 would essentially be bundles of licenses in this
9 market, and sellers, who are heterogeneous in
10 terms of their willingness to accept. And the
11 willingness to pay and willingness to accept are
12 factors, are one of the core benchmarks, not the
13 only ones, for trying to understand how a
14 negotiation between these parties would play out.

15 So these agents within this structural
16 model are then randomly selected to negotiate with
17 one another, and there's not always a deal that
18 would be had in this underlying model, but if
19 there is, then they would pursue, sort of,
20 standard bargaining protocols from the economics
21 literature and generate a price. Those prices, in
22 turn, would then generate a distribution of prices
23 that come out of this framework.

24 Q After developing this framework, how you
25 did you analyze it?

1 A I did it in two ways.

2 Because the framework actually drills
3 down to economic models of bargaining in a
4 decentralized market setting, it lends itself to a
5 very, sort of, conventional analysis using
6 equilibrium concepts that's quite conventional
7 within economics. And the appendix, the second
8 part of the appendix to my written rebuttal, in
9 fact, includes that technical analysis. And it's
10 one that's very general. It doesn't, for example,
11 commit to a particular, you know, distributional
12 form of what those buyers and sellers look like in
13 the overall population. It leaves it very open
14 and derives some very general results.

15 That's hard to digest, quite frankly, in
16 the body of a report. So the report itself then
17 goes into some simulations based on that model,
18 based on a particular distributional set of
19 assumptions, essentially to illustrate many of the
20 claims that are demonstrated in the appendix.

21 Q These are referred to as Monte Carlo
22 simulations?

23 A Yes. These are essentially drawing
24 hundreds of thousands -- tens or hundreds of
25 thousands of these buyer-seller dyads having to

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1 negotiate and generate prices. That will, if one
2 samples enough from this -- from this simulation
3 framework, generate distribution prices. That's
4 conventionally known as a Monte Carlo simulation.

5 JUDGE STRICKLER: Good morning,
6 Professor.

7 THE WITNESS: Good morning.

8 JUDGE STRICKLER: How are you, sir?

9 THE WITNESS: I'm well. How are you?

10 JUDGE STRICKLER: Fine, thank you.

11 You refer to the willing buyers and
12 willing sellers in your simulation as
13 heterogeneous. What elements did they have in
14 this simulation? What made them heterogeneous?
15 Was it with regard simply to their willingness to
16 pay and willingness to accept, other factors?
17 Could you describe it?

18 THE WITNESS: Yes. So the underlying
19 fundamentals that would make buyers and sellers
20 differ or differ from one another or differ from
21 similarly situated buyers could be anything within
22 this model. So it could be driven by different
23 tastes. It could be driven by different economies
24 of scale. It could be driven by quality
25 parameters. So there might be a particular bundle

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1 of a license that has very high-quality artists
2 and a buyer -- and buyers in general. Maybe some
3 buyers would be more attracted to that.

4 So the model is deliberately, I guess,
5 ambivalent about committing to a particular reason
6 that the buyers and sellers would be
7 heterogeneous. There are many economic accounts
8 that would give rise to that heterogeneity. I
9 believe the model is consistent with many of
10 those.

11 JUDGE STRICKLER: So those underlying
12 factors lead to heterogeneity with regard to
13 willingness to buy -- willingness to pay,
14 willingness to accept, but otherwise not
15 described, just assuming a variation in reasons
16 why we would get to these heterogeneous
17 willingness-to-accept and willingness-to-buy
18 parameters?

19 THE WITNESS: The distributions
20 themselves are organic to the simulation. But
21 part of that, I think, is that I didn't want to
22 have to commit to a particular reason. There are
23 many kinds of reasons that buyers and sellers
24 might differ in their willingness to pay and
25 willingness to accept. And if one commits to a

1 particular account, then the generality of the
2 model is actually compromised.

3 JUDGE STRICKLER: Thank you.

4 THE WITNESS: Thanks.

5 BY MR. BLAVIN:

6 Q Are such simulations frequently used in
7 economics?

8 A Yes, they're used quite frequently in
9 economics for a variety of reasons. One might be
10 to simply illustrate, as I've done here, some
11 general propositions that can be derived
12 analytically but are kind of hard to get your mind
13 wrapped around. Another could be if a
14 simulation -- that's also, to some extent, present
15 here -- give rise to distributions that can be a
16 little bit complex, simulations can help
17 understand and inform intuitions about what those
18 distributions are going to look like.

19 And, third, simulations are often a core
20 block or a core stage in calibrating a model,
21 essentially using a simulation with particular
22 parameters, ask how well the data fit it, tweaking
23 the parameters, and readjusting the simulation.

24 Q Can you provide any real-world examples
25 in which such simulations would be used.

1 A Yes. They're all over the place, quite
2 frankly. Particularly within the government, with
3 a government agency that's required to conduct a
4 cost-benefit analysis of, say, a new financial
5 regulation or a new health regulation, it's quite
6 common to use simulation, a Monte Carlo simulation
7 analysis to determine what are the likely effects
8 of an underlying change, drilling down to what the
9 structural relationship is among the parties who
10 are going to be affected by that change.

11 Within the financial services industry,
12 it's extremely common to think about how to
13 understand, say, new financial products or
14 derivatives by asking how could things evolve in
15 the future and what is the overall distribution of
16 risks going to look like in the future. So
17 simulation Monte Carlo approaches are very, very
18 common within that context as well.

19 Policy think tanks -- I was affiliated
20 with the RAND Corporation for ten years in the
21 Institute for Civil Justice. Many of the things
22 that we were asked to do was -- were essentially
23 endeavors to understand, well, if we change the
24 fee-shifting rule or if we change the standing
25 rule, how would that change the way litigation

1 takes place in practice.

2 And we were able to use, quite
3 successfully, I think, some simulation approaches
4 to understand things like how litigation would
5 play out if we changed some of the underlying
6 rules.

7 Q You noted earlier that simulations can
8 be an important step in calibrating a model to
9 real-world data. Did you do that calculation
10 here?

11 A I didn't do that for the purposes of my
12 rebuttal testimony mainly because it wasn't
13 necessary. The purpose of the simulation in this
14 rebuttal was to help flesh out and to animate both
15 the general more theoretical results of the
16 structural modeling, which is in the appendix, but
17 also because I was called in as a rebuttal witness
18 for Professors Katz and Shapiro. So the critiques
19 of their approach come immediately out of that
20 structural approach without having to calibrate
21 that model. Had I been asked to affirmatively
22 come forward with my own estimates of fair rates,
23 then a next step might have been to calibrate this
24 model.

25 Q Now, when you say that Professors

1 Shapiro and Katz failed to offer a satisfactory
2 account of "how the statutory license may crowd
3 out consensually negotiated deals," what do you
4 mean by that?

5 A Well, I think it starts back with what I
6 was discussing before, that within this structural
7 framework of buyers and sellers within these
8 populations that have heterogeneous willingnesses
9 to pay and accept, those individual negotiations
10 are going to give rise to a range of negotiated
11 prices.

12 I think I've got a demonstrative here
13 that will just heuristically give you a sense of
14 what's going on. Just imagine that we've got,
15 say, 30 negotiated contracts. This is in the
16 hypothetical market in which there is no shadow of
17 a statutory regime. And we've got buyers and
18 sellers who are getting together, and if the
19 buyer's willingness to pay exceeds the seller's
20 willingness to accept, that's going to give rise
21 to a bargaining range. Somewhere in the middle of
22 that range, depending on the bargaining power of
23 the parties, they're going to reach a deal.

24 So these blue dots essentially represent
25 an effective per-play price that would come out

1 from these, sort of, heuristically generated
2 deals. This is really for illustrative purposes
3 only.

4 MR. BLAVIN: Your Honor, just so you
5 know, this is displayed on the back of the screen
6 there as well.

7 THE WITNESS: I may seek your
8 indulgence. I've got some animations of these
9 slides. I apologize in advance for you having to
10 crane your necks, but Professor Katz had the white
11 bird and the black bird. What else could I do.

12 JUDGE STRICKLER: White swans and black
13 swans.

14 THE WITNESS: Oh, yes, exactly.

15 BY MR. BLAVIN:

16 Q So how does the imposition of a
17 statutory rate change things?

18 A If one were to take this hypothetical
19 market, very decentralized market, and impose a
20 statutory rate, this is essentially creating what
21 an economist would refer to as a real option, that
22 the purchaser or the buyer, and only the buyer in
23 this circumstance, would have the ability to say,
24 well, I guess I could negotiate a deal using the
25 same sort of negotiating protocol that we've been

1 thinking about earlier or I could just go to the
2 statutory rate and exercise my option to purchase
3 a license non-consensually without having to
4 bargain. So that statutory rate creates this
5 option in the hands of the buyer.

6 And, here, one of my less exciting
7 animations, is an imposition of a statutory rate.
8 I've just picked arbitrarily a statutory rate of
9 20/100, but, again, this is for illustrative
10 purposes only. So one can imagine that in this
11 circumstance some of the buyers in those
12 negotiations would now be looking to that
13 statutory rate as a potential option for them.

14 Q What are the consequences of buyers
15 having this real option?

16 A Well, as you can imagine, it's not --
17 it's not particularly hard to imagine it, that in
18 a situation where a buyer now has an option to
19 purchase at the statutory rate level, then she or
20 he or it is going to think, well, if that's a
21 better deal than the deal I would have otherwise
22 negotiated, then I'm going to consume at the
23 statutory rate rather than to negotiate a
24 transaction. And if you can go back, maybe, to
25 that slide, we can sort of see what would happen

1 here.

2 So imagine, for instance, Mr. Blavin,
3 that you and I, let's take that third transaction
4 in on this chart. It's one that goes off at a
5 negotiated rate in the absence of a statutory rate
6 at around 25/100 of a cent per-play -- effective
7 per-play rate. Let's just suppose for argument's
8 sake that I was the seller and you were the buyer,
9 and as a buyer, you valued at, say, 28/100 of a
10 cent and, as a seller, I valued at 22/100 of a
11 cent, and we reached a deal that was right in the
12 middle, all right?

13 So you as a buyer now are realizing that
14 you could just go through this deal or negotiate
15 this deal with me at 25/100 of a cent, but you now
16 have another option. You can consume at -- and
17 purchase from me on a non-consensual basis for
18 20/100 of a cent. That's going to be true for
19 just about for every one of these blue dots that
20 is above the line that would reach a price in
21 excess of the statutory rate. Buyers are going to
22 find it in their economic interest to exercise
23 that option.

24 So here, what I can -- I'll ask you to
25 start my little animation here -- what's going to

1 happen is those blue dots are essentially going to
2 converge to the statutory licensing rate line.
3 Those transactions are essentially going to be
4 converted from consensual transactions at an
5 assortment of rates to non-consensual transactions
6 at the statutory rate.

7 Q You said there was a second consequence
8 as well, I believe.

9 A There is a second consequence as well.
10 It's a little bit more subtle and slightly more on
11 the fringes, but it turns out that not all the
12 action is in those deals that would have been
13 negotiated above the statutory rate. There are
14 some deals that would have been negotiated below
15 the statutory rate that might actually converge up
16 to the statutory rate. I think I've got another
17 demonstrative here as well.

18 So now I want you to imagine,
19 Mr. Blavin, that you and I are negotiating over in
20 that fourth column and but for the statutory rate,
21 we would have reached a deal at, say, 19/100 of a
22 cent per play. I -- think that's approximately
23 where that blue dot is -- but that you were
24 someone who valued at, you know, 24/100 of a cent
25 and I valued at, say, 17. And that's where we

1 would have been in the absence of the statutory
2 rate.

3 Now, in this case, that statutory rate
4 doesn't look as good to you as the purchaser as
5 purchasing consensually at 19/100 of a cent. But
6 to me as the seller, I now realize that if I
7 simply refuse to bargain with you, then you will,
8 in fact, resort to the statutory purchase.

9 And so the interesting effect here is
10 that sellers who know that they're facing a buyer
11 that would consume at the statutory rate anyway
12 will say, look, I'm not interested in bargaining,
13 go ahead and just consume at the statutory rate.
14 Now, that's typically going to be those buyers --
15 by definition, it's going to be those buyers that
16 value more than the statutory rate. And, as a
17 result, the deals below this line that might get
18 sucked up into it are going to tend to be the ones
19 that are, sort of, close to the line already,
20 inside the gravitational pull, if you will, of
21 this line.

22 So here's another small animation here
23 of the dots -- of a few of the dots going up.

24 JUDGE STRICKLER: Excuse me, Professor,
25 I just want to go back to your most recent

1 hypothetical. You had a willingness to pay of 19,
2 and what was that willingness to pay in that
3 hypothetical?

4 THE WITNESS: The willingness to pay on
5 that, I think I said 22.

6 JUDGE STRICKLER: Oh, 22.

7 THE WITNESS: Yes. And that's critical,
8 Judge Strickler, because the crowding up, if you
9 will, using the geometry in this slide, depends on
10 the seller realizing, hey, if I don't negotiate
11 with this buyer, this buyer will still consume at
12 the statutory rate. So now even though we would
13 have reached a deal below it, I can force a
14 transaction by just not bargaining above that
15 statutory rate. So here there's going to be a
16 small number of these transactions, not all of
17 them, by any means, that are inside the
18 gravitational pull and go ahead and -- so you're
19 going to see some of those converge to the
20 statutory rate as well.

21 Now, there still will be some deals --
22 as long as the statutory rate isn't too low, there
23 still will be some deals left over, but they'll
24 tend to be down below the line.

25

1 BY MR. BLAVIN:

2 Q And Professors Shapiro and Katz have
3 suggested that the value of deals may be driven up
4 or pulled up by the magnet effect of the statutory
5 rate. Is this a version of that?

6 A Well, I think it could be a version of
7 what they're talking about. I wasn't entirely
8 clear what they're discussing, but this is one
9 phenomenon in which there would be some deals that
10 would go off below the statutory rate
11 consensually, and they're sort of close to the
12 statutory rate, that actually would now become
13 non-consensual deals at the statutory rate.

14 Q So why does this matter?

15 A Well, it matters insofar as one is
16 interested in looking at precedent transactions to
17 help understand or benchmark any set of inferences
18 about what this whole population would look like
19 without the statutory rate. So this gives rise --
20 I think I'm done with my animation, by the way.

21 This gives rise to a phenomenon that I
22 think you've probably heard before that's called
23 selection bias, which says if we're trying to
24 infer something about a larger data set, then we
25 need to be mindful of whether what we are

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1 observing in practice is systematically skewed to
2 the left or to the right of the set of, you know,
3 characteristics that we're ultimately interested
4 in.

5 JUDGE STRICKLER: Professor, in this
6 case -- in the discovery phase of this case, we
7 had permitted discovery with regard to parties'
8 internal valuations, that is we specifically said
9 their willingness to pay and their willingness to
10 accept. If you were armed with that sort of
11 internal information through the discovery
12 process, would you be able to -- can we go back to
13 the last animation for a moment, Mr. Nickels? --
14 would we be able to fill in, have actual
15 information to the extent that we had information,
16 documents, deposition testimony with regard to
17 what willingness to accept was, what willingness
18 to pay was, to find out whether the dots were both
19 above and below the existing statutory line or any
20 line whatsoever, and that way we would take this
21 theoretical point and actually be able to put some
22 factual meat on the bones, so to speak?

23 THE WITNESS: I think I understand the
24 question. The answer is they would be a promising
25 source of information. If, going into a

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1 negotiation you had what you thought were quite
2 reliable estimates of the parties, maybe there are
3 different scenarios that they laid out with
4 different probabilities, that might help get a
5 sense of where those willingness to pay and
6 willingness to accept values are. That could be
7 different expectations about the future. This is
8 exactly one dimension of heterogeneity that I want
9 to remain open to that I think the structural
10 model would admit.

11 JUDGE STRICKLER: The way the Monte
12 Carlo simulations that you speak of, you have
13 these large variations, large amount of
14 heterogeneity, through the discovery dealing with
15 the actors who are actually involved in this
16 proceeding, we would be able to look at a, I don't
17 want to call it a subset, but the actual set of
18 bargaining parties. To the extent we have that
19 information, would that allow us, again, to repeat
20 myself, to move from the theoretical to the
21 practical?

22 THE WITNESS: So I think that would be a
23 helpful piece of information, maybe not the only
24 piece of information that you would be interested
25 in if you were trying to calibrate it. But,

1 ultimately, I think you see where I'm going on
2 this, but I'll probably go there anyway because we
3 have a slide deck, after all. But that when we
4 observe transactions out there, we are observing
5 them from this lower stripe.

6 So one of the things to concern yourself
7 with is, all right, these are the ones that didn't
8 get sucked up into the statutory regime.

9 JUDGE STRICKLER: Right. And that is a
10 point I know you'll be headed to because your
11 point is, if you look at the Pandora-Merlin
12 agreement, for example, it will be below the
13 stripe because you can view it, but there may be a
14 whole host of them, perhaps, that could have been
15 above the stripe that you'll never see because
16 they get pulled down, but that's because we're
17 looking at transactions. The whole point of
18 discovery, of course, is to peel away the curtain
19 and see what willingness to pay and willingness to
20 accept were, and that's why I asked you the
21 question of whether that would be helpful data to
22 find out where these points really are.

23 THE WITNESS: Yes, I'm with you on the
24 logic here. One of the things that would be --
25 I'd be a little bit concerned about, quite

1 frankly, if we had a non-consensual deal that
2 might have been a consensual deal and we had
3 access to projections about, you know, valuations
4 had they reached a deal, how serious would those
5 projections be. So I don't even know that we
6 would get them, quite frankly, with a lot of these
7 non-consensual deals.

8 JUDGE STRICKLER: Although in the law
9 and economics field, and in economics in general,
10 we deal with rational actors. If they have
11 projections, we have to take their projections as
12 the rational expectations of the future. It
13 doesn't mean they're right. We just assume them
14 to be rational because otherwise I guess it would
15 be irrationality, and then we're hopelessly lost.

16 THE WITNESS: I agree. This structural
17 model is, in fact, based upon a rational actor
18 scenario. It's just the question of what kind of
19 data would we have available from those
20 non-consensual deals in which there doesn't really
21 have to be any bargaining at all, right? So you
22 may not have as many of those -- as rich a source
23 of data for those deals.

24 JUDGE STRICKLER: Because they wouldn't
25 even have the sense to bargain, you're saying.

1 THE WITNESS: Right.

2 JUDGE STRICKLER: Thank you.

3 BY MR. BLAVIN:

4 Q Now, notwithstanding this selection bias
5 issue, does that mean that you wouldn't look at
6 any market data that might exist?

7 A No, it doesn't mean I wouldn't look at
8 market data that exists. I think this actually
9 touches on the discussion that Judge Strickler and
10 I were just having, that the deals that are
11 generated -- there still may be deals that are
12 generated within this tail of the distribution.
13 Those are informative, particularly if one is
14 trying to determine what the overall distribution
15 is, keeping in mind that one is in the tail of the
16 distribution. So they can still be informative.
17 I wouldn't want to rest completely on those, and
18 there may be other market data that are also
19 available.

20 So, for example, I think I've got
21 another demonstrative. And I'm going to flip the
22 axes on you here to do something that's a little
23 bit more conventional, sort of, you know,
24 histogrammy or frequency distribution related. So
25 this is, you know, heuristically representing that

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1 same set of deals or similar set of deals that
2 give rise without a statutory rate to some
3 distribution of prices, and they are, sort of,
4 stacked up in terms of their -- you know, the
5 probability density within that population. So
6 this is, kind of, a standard bell curve type
7 distribution.

8 And imagine that we dropped a statutory
9 rate right down in the middle. Well, as I noted
10 earlier, everything to the right side of that
11 statutory rate is now going to become a
12 non-negotiated, non-consensual statutory
13 transaction. Essentially, it's going to crowd out
14 that half, in this case, of the distribution. A
15 few of the deals on the left-hand side of that
16 line might also get sucked up into the statutory
17 rate.

18 I think this gets back to this question
19 of inference. So what we would be dealing with,
20 from an empirical frequency perspective, is no
21 longer a bell curve but a curve that's got this
22 big spike right at the statutory rate and then
23 sort of a skewed or a catawampus bell curve left
24 over on the left-hand tail.

25 So another source of information that we

1 might use is what's the frequency with which these
2 non-negotiated deals are going off because that
3 would at least give us some indication of how many
4 of these deals got cut off of the top half of the
5 distribution.

6 There might be other information that we
7 would use as well. For instance -- and I
8 understand Professor Rubinfeld has used the
9 interactive market or interactive space of this
10 market as a way to say, well, is there a portion
11 of this market that actually isn't subject to the
12 statutory licensing rate, and, in that
13 circumstance, that might be another source of
14 information that's available.

15 Q So what are the implications of this for
16 Professor Shapiro's approach and specifically his
17 reliance on the Pandora-Merlin deal?

18 A Well, I think there are a couple of
19 them. First of all, so Professor Shapiro has put
20 forward a -- one deal drawn from the negotiated
21 transactions that survive the imposition of a
22 statutory rate. That inference is something that
23 doesn't try to account for the fact that it's
24 being drawn from a tail of the distribution and a
25 left tail of the distribution. So that's one area

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1 that I take issue with Professor Shapiro. He
2 doesn't make any adjustments for the fact that
3 this deal is -- may be representative, may be not,
4 from the tail of the distribution.

5 The other part is it's one deal and it
6 doesn't consider all the market data, other deals
7 that may have been negotiated in the shadow of the
8 statutory rate, the non-consensual deals and the
9 frequency of uptake of non-consensual deals, as
10 well as nearby spaces in this market, such as the
11 interactive space, where we might be able to glean
12 a little bit about willingness to pay and
13 willingness to accept, after also making
14 adjustments for any distinguishing features of
15 that space.

16 So I think it's the combination of not
17 using more than one deal and also not making
18 adjustments for the fact that we are looking at a
19 tail of the distribution.

20 Q Professor Shapiro testified at the
21 hearing that the existence of the Pandora-Merlin
22 agreement contradicts your analysis. What's your
23 response to that point?

24 A I don't see how it contradicts the
25 analysis. I think that my recollection -- and I

1 did read through Professor Shapiro's testimony,
2 his testimony transcript. I think he was making
3 the point that Pandora is a high-valuing -- a
4 high-valued company, I guess. It's a large
5 company. It's not a small player. And,
6 therefore, it wouldn't be one of these low-value
7 transactions or low-volume transactions that
8 survives the imposition of the statutory rate.

9 I'm not so sure that's the case, for the
10 following reason. Even though it's clear Pandora
11 is a very large player in the noninteractive
12 space, the thing that one is negotiating over
13 matters as well. In this case it wasn't the
14 catalog of a major label. It was Merlin. And
15 there was, as I understand it, even options for
16 the various parts of Merlin to decide to go into
17 that deal or not. So it was a much smaller player
18 within Pandora's overall portfolio of songs. So
19 it could well be the case that Pandora is a
20 high-value company but just doesn't value this
21 particular bundle of assets very highly.

22 Q Does the mere fact that an agreement
23 exists below the statutory rate demonstrate that
24 your analysis is incorrect?

25 A No, it's completely consistent with the

1 analysis. I guess in the extreme case where we
2 were to set the compulsory license rate at zero,
3 you wouldn't see any more of those deals. But
4 it's completely consistent with my analysis.

5 Q So what would happen if the
6 Pandora-Merlin agreement became the basis for the
7 next statutory rate?

8 A Well, I think this is kind of an
9 important point. Do you mind if I use the Elmo
10 here? I'm going to draw on it. So let me just
11 switch places here. I want you to -- I'm going to
12 try to recreate, the best I can, that distribution
13 that I put up a few slides ago, all right, of
14 rates. This is essentially the distribution that
15 would be negotiated in the absence of a pureplay
16 rate -- excuse me, of a statutory royalty rate.

17 And let's suppose, again, like we
18 dropped a statutory rate somewhere down the
19 middle. That's immediately going to have the
20 effect of crowding out these transactions and
21 essentially creating a spike here, all right? The
22 remaining transactions that we'll actually observe
23 are going to look somewhat similar to that. There
24 might be a little bit of a falloff, all right?
25 And that's where we sit.

1 Now, as I understand, Professor Shapiro
2 has taken a transacted deal from the shadow of
3 this truncated distribution now, all right. And
4 let's suppose, just for argument's sake, and it
5 will be clear in a second -- I don't think this is
6 a particularly good idea, but let's suppose for
7 argument's sake that that became the new statutory
8 rate for the next five years, all right? We're
9 going out with the old and in with the new, and
10 we're moving that statutory rate further down.
11 Well, I now want you to flash forward in five
12 years and ask what's the set of deals that we're
13 going to be looking at that are negotiated in the
14 shadow of that new rate?

15 MR. EBIN: Excuse me. Objection, Your
16 Honors, this has now gone way beyond the scope of
17 what's in Professor Talley's written rebuttal
18 testimony.

19 MR. BLAVIN: Your Honor, may I respond?

20 CHIEF JUDGE BARNETT: Yes.

21 MR. BLAVIN: This point is made
22 essentially throughout his testimony. We
23 distributed demonstratives of these histograms
24 before, and he's just illustrating it through the
25 use of an Elmo. As numerous experts have done

1 here, they're just putting some flesh on their
2 points. And he is specifically rebutting
3 Professor Shapiro, who came in and offered
4 testimony on this issue.

5 CHIEF JUDGE BARNETT: Overruled. I
6 don't think it's that far afield.

7 A All right. Well, I'm almost done
8 anyway.

9 If you want to -- if you want to then
10 think, well, what kind of data are we going to see
11 then five years from now under this new regime?
12 Well, it's not going to be those same deals, all
13 right? Now there's going to be a set of deals
14 that are similarly crowded out from above and a
15 new distribution that's even further down would
16 take hold, which possibly Professor Shapiro might
17 be available to come in and offer another
18 contract, and you can see which way this would go
19 if this were the -- if this was a pattern of
20 responding to these sorts of deals.

21 But, essentially, it's a turtles all the
22 way down phenomenon, that we would increasingly
23 contract and contract and contract to the
24 left-hand tail of the distribution.

25 JUDGE STRICKLER: I just want to make

1 sure I understand something at a more general
2 level with regard to your criticism of
3 Dr. Shapiro's point as it relates to the use of
4 the Pandora-Merlin agreement.

5 This particular criticism you have
6 relates to that dynamic effect you talk about in
7 five-year iterations as we move to the left on the
8 graph that you created. This particular part of
9 your testimony is not a criticism of the steering
10 impact that Dr. Shapiro speaks of in the
11 Pandora-Merlin -- that he sees evidenced in the
12 Pandora-Merlin agreement. You have other
13 criticisms of that later on, but this criticism is
14 geared to the rate and using the rate because it
15 falls to the left of the statute, given that it's
16 a dyad of Pandora and Merlin?

17 THE WITNESS: Yes, this criticism is one
18 that is independent of my criticisms of the
19 steering point.

20 JUDGE STRICKLER: That's the point I
21 wanted.

22 THE WITNESS: Even if there were no
23 steering, steering were impossible, steering
24 weren't completely possible, this sort of
25 phenomenon would be something that we should be

1 concerned about. It's not that that contract
2 shouldn't matter. It should inform us. But we
3 have to understand what we are observing in those
4 contracts are draws from a tail of the
5 distribution and make adjustments accordingly, or
6 you do end up running into this type of a danger.

7 JUDGE STRICKLER: Do we understand that
8 it's an example of the tail of the distribution or
9 do we understand that it may be in the tail of the
10 distribution?

11 THE WITNESS: It's possible. I believe
12 that Pandora has asserted that this is -- this is
13 a deal that has gone off at below the statutory
14 rate, which would be completely consistent with
15 this underlying model.

16 JUDGE STRICKLER: Well, that assumes
17 that the statutory rate has a certain particular
18 legitimacy or lack of legitimacy, if the statutory
19 rate had been set by previous judges
20 extraordinarily high this might not be in the
21 tail, it might be well within the middle of the
22 pack. So we would need more evidence to determine
23 whether it is indeed in the tail or not in the
24 tail.

25 THE WITNESS: So it's clearly in the

1 tail. The question is how fat the tail is. I
2 think that's your -- that's what you're asking.

3 JUDGE STRICKLER: How do we know it's in
4 the tail?

5 THE WITNESS: Right. So one way that we
6 can try to assess that is to ask, well, to what
7 extent do we see uptake of non-consensual deals.
8 That will give us some sense of how far into the
9 tail that we are. Imagine that the statutory rate
10 were set at infinity or some arbitrarily high
11 number. That number of non-consensual deals would
12 go to zero, right? And then you've got pretty
13 much the whole distribution.

14 JUDGE STRICKLER: Well, it's not
15 precedent for us, but we have statutory rates that
16 were set in Web II, going back to Web II, and then
17 we see a lot of negotiation resulting in rates
18 that are lower. Those rates aren't precedent for
19 us at all because Congress has told us they're not
20 precedential.

21 But consistent with your theory, we have
22 set statutory rates, and then we see bargaining
23 for, perhaps, a host of reasons. Like you said,
24 we've lost some heterogeneity out there, but we
25 see bargaining and we end up seeing pureplay

1 rates, small pureplay rates, Settle- -- Webcaster
2 Settlement Act rates for the NAB, Webcaster
3 Settlement Act rates for SiriusXM.

4 So at least under your theory, it
5 suggests that the rate would be higher, not
6 infinity because it wasn't infinity, but it was
7 set at whatever it was set at, and then we saw
8 bargaining thereafter. Now, there may be other
9 reasons for bargaining, but we have seen
10 bargaining off the statutory rate. Wouldn't that
11 be consistent with the idea that rates below the
12 statutory rate might have suggested that the
13 statutory rate was too high?

14 THE WITNESS: I'm not so sure that's the
15 case. The fact of the matter is, you're going to
16 see -- there's going to be incentive to bargain so
17 long as the statutory rate isn't zero. There are
18 going to be dyads of buyers and sellers that would
19 be willing to bargain.

20 One of the critical issues is how
21 frequently is that happening versus non-consensual
22 transactions, for example.

23 JUDGE STRICKLER: I guess the question
24 is -- again, and I want to emphasize, this doesn't
25 make those rates precedential, but if it were the

1 case that nobody was operating at the statutory
2 rate and everybody had decided to enter into side
3 deals and they were all to the left of the
4 statutory rate and we didn't see anybody operating
5 at the statutory rate, if that was the situation,
6 under your theory, would that be suggestive of the
7 fact that the statutory rate was too high and that
8 those rates were not in the tail at all but were
9 more towards the middle?

10 THE WITNESS: Yes, I think I understand
11 your question. It may be another version of the
12 set it at infinity. You're just saying set it at
13 such a large number that no one would ever do a
14 non-consensual deal. And I think that's right,
15 that if you set it at such a point that
16 non-consensual deals completely disappear, then
17 all you would see in this distribution is
18 consensual deals.

19 JUDGE STRICKLER: Thank you.

20 BY MR. BLAVIN:

21 Q Just following up, you would want to
22 look at the number of parties who opted for the
23 statutory license?

24 A Absolutely. So one of the things
25 that's -- and I think my discussion just now with

1 Judge Strickler bore that out a little bit is that
2 when you could try to glean, well, what does this
3 distribution look like, is that not only to look
4 at what are the deals we observe in the tail of
5 the distribution but, also, how high is that
6 spike, how much of the other side of this
7 distribution may have been cut off. So both of
8 those pieces of data and possibly others, as I
9 mentioned earlier, in the interactive space might
10 be relevant inputs.

11 MR. BLAVIN: If we can go back to the
12 slides.

13 BY MR. BLAVIN:

14 Q So with respect to your second point,
15 your second criticism, can you please explain what
16 you mean by "competition from the downstream
17 consumer market can constrain price in the
18 upstream licensing market"?

19 A Sure. The market for services in this
20 instance is one of, essentially, an intermediate
21 supplier. They sell to a downstream market of
22 consumers. They serve as a downstream market of
23 end listeners, and then purchase inputs, in
24 particular, licensing bundles from upstream
25 suppliers.

1 And the question of, well, what's their
2 demand going to look like for those upstream
3 licenses is very closely related to what they
4 anticipate their downstream market is going to
5 look like. So example, in the extreme, suppose
6 all of the listeners of a service were to
7 disappear from the face of the earth and all their
8 prospective listeners were to disappear from the
9 earth. It's not too far of a stretch of the
10 imagination to say that service's demand for
11 licenses is essentially going to go to zero. They
12 don't have a market to supply. Less extremely, if
13 that service is facing a downstream market that's
14 very, very price sensitive, that has lots of
15 competition within it, there are reasons to
16 believe that that competition can get fed back
17 upstream to the service's own demand for the
18 inputs that it is purchasing.

19 Q Now, assuming that there is a very high
20 elasticity of demand in the downstream consumer
21 market, does it matter, as Professors Katz and
22 Shapiro claim, that the major labels may be
23 pricing as monopolists in the upstream licensing
24 market for interactive services?

25 A Well, I mean, I guess the interesting

1 point here is that let's just suppose that they're
2 the only producers or that there's a -- say, a
3 single label that's the producer in the upstream
4 market. It might be technically, in a very
5 pedantic sense, a monopolist because it's the only
6 game in town. But if it is facing a demand that
7 is itself very price elastic, possibly because of
8 a downstream elasticity or price sensitivity in
9 its market, it's not going to be a monopolist
10 that's going to be able to do very much. It's not
11 going to be able to charge rates at an exorbitant
12 level because it realizes that its downstream --
13 that the downstream end users are going to flee if
14 those rates end up being passed on to them.

15 It's not going to be able to constrain
16 quantity the way that monopolists sometimes do,
17 but the type of dead weight loss -- I don't know
18 if you've seen some of these diagrams here, but
19 dead weight loss is associated with monopolies,
20 that's something that economists really care
21 about, and that degree of dead weight loss would
22 be actually quite small for a monopolist who is
23 facing a very, very elastic demand.

24 JUDGE STRICKLER: Even though the
25 monopolist was facing a very elastic demand

1 because it was a monopolist, it would still be
2 able to shift some of the intermediate market
3 consumer surplus all the way to producer surplus.

4 THE WITNESS: In the extreme, the answer
5 is actually no. If it were facing a completely
6 price elastic demand, it wouldn't be able to. So
7 the monopolist might be -- I mean, that's what
8 monopoly pricing is. But I think it's important
9 to understand that if you've got a monopolist that
10 is facing a demand curve that's extremely elastic,
11 it may be yet another one of these examples of,
12 okay, well, maybe technically this is a monopoly,
13 but it's not necessarily a monopoly that we should
14 have occasion to be excessively concerned about.

15 There are other examples as well. For
16 instance, companies that make very, very
17 high-quality services or products may end up
18 gaining very dominant positions in the market.
19 But it's not necessarily something that we should
20 be incredibly concerned about simply because it's
21 their investments in quality that have put them
22 there, and it's creating value for the market.

23 Similarly, and I guess it's in some ways
24 relevant here as well, the underlying market here,
25 it concerns markets for copyrights. Those are

1 state sanctioned monopolies over the expression of
2 an idea and, it's essentially there so as to
3 catalyze entrepreneurship, creativity, and the
4 growth of the useful arts. So it may just be
5 another example of a situation where, yes, this
6 may be, from a college sophomore Econ 101
7 perspective, a monopoly, but is it a monopoly that
8 we should be too concerned about? That seems
9 highly more dubious.

10 CHIEF JUDGE BARNETT: Is this a good
11 time to take a break?

12 MR. BLAVIN: Yes, Your Honor.

13 CHIEF JUDGE BARNETT: Okay. We will be
14 at recess for 15 minutes.

15 (A brief recess was taken.)

16 CHIEF JUDGE BARNETT: Please be seated.
17 I'm going to say this out loud because it feels
18 like a Tuesday when it's really Wednesday. We
19 will break promptly at 4:15 today.

20 Mr. Blavin.

21 MR. BLAVIN: Thank you.

22 BY MR. BLAVIN:

23 Q Professor Talley, I think you had
24 covered the first point on this slide. If you
25 could please describe briefly what you were trying

1 to capture in the second point that you have
2 listed here.

3 A Yes. So this feeds into what might
4 cause a purchaser's demand to be extremely elastic
5 so that even if it were facing a single monopoly,
6 the monopoly wouldn't be able to extract much in
7 terms of monopoly rates. This has to do with
8 what's the demand that is being served by that
9 downstream market. One way that an intermediate
10 purchaser can itself exhibit extremely elastic
11 demand is if that downstream market that it serves
12 itself is very, very price sensitive and highly
13 elastic. That can essentially get upstreamed, as
14 it were, to the demand, or sometimes economists
15 refer to this as the derived demand of the
16 intermediate supplier for the purchases of its own
17 inputs.

18 Q Thank you.

19 With respect to the first point you have
20 listed here, did you attempt to model that at all
21 in your structural simulations?

22 A There are ways within the simulations to
23 replicate the idea of a, I guess, an elasticity
24 shock at the buyer level. So I did that in two
25 ways in the simulations. And this was essentially

1 to say, okay, we've got a distribution of buyer
2 and seller types.

3 In the simulations I used what is
4 essentially a three-dimensional bell curve, a
5 bivariate normal distribution, and said, well,
6 what would happen if suddenly under scenario one
7 the buyers in this market, their demand shifted
8 down by some figure. I think in this chart it's
9 half or a third of a standard deviation. And the
10 second is what would happen if buyers in this
11 market suddenly had valuations that were
12 70 percent of their valuation before.

13 Q What effect did this have on the price
14 distributions that emerged?

15 A Well, the price distributions that
16 emerged both went down. They shifted downward.
17 And they also became more compressed, which would
18 be systematically or, I guess, symptomatic, I
19 guess, of a more elastic demand curve.

20 Q Now, with respect to the second point
21 listed here, is an elasticity shock in the
22 downstream market one way that elasticity shock
23 that you model may occur in the upstream market?

24 A Yes, that's one way that that
25 intermediate producer might end up having an

1 elastic demand for its own intermediate goods is
2 if it's facing a downstream market that suddenly
3 has become more elastic, more price sensitive.

4 Q You're aware that Professor Shapiro has
5 responded to this point by saying that the
6 elasticity of demand in the upstream licensing
7 market does not necessarily mirror the elasticity
8 of demand that may exist in the downstream
9 consumer market, and he's made reference to the
10 Hicks-Marshall formula. Do you disagree with
11 that?

12 A As a general matter of theory, I don't.
13 The Hicks-Marshall or Marshall-Hicks, depending on
14 who your favorite economist is, I guess, formula
15 does tell us a little bit about the conditions
16 under which a downstream market's price
17 sensitivity would get passed upstream to the
18 demand for an input. And under certain
19 circumstances, it can get passed very, very
20 frictionlessly upstream. And in some
21 circumstances it can be diverted or absorbed
22 elsewhere.

23 Q So what are those circumstances or
24 factors that may exist that would be relevant to
25 that deformation?

1 A Sorry for starting too soon.

2 So the key two factors are, is there, in
3 fact, an elastic downstream demand curve. The
4 second is, how significant is the expenditure on
5 that input versus other inputs, right, the cost
6 intensity of that particular input that we're
7 interested in.

8 So if we're thinking about licenses in
9 this case, how -- how much of the overall variable
10 cost of this company is made up of having to
11 purchase licenses as opposed to other costs. The
12 larger that cost share, the more this elasticity
13 is going to be passed through. In contrast, very,
14 very small cost share inputs, things that you
15 don't spend much capital on at the input stages,
16 don't get passed through as much. That's one of
17 the core insights of Hicks-Marshall or
18 Marshall-Hicks. There's sometimes a saying that
19 goes with it that it's the significance of being
20 insignificant. If your insignificant has share of
21 the cost, then that elasticity is less likely to
22 be passed through.

23 JUDGE STRICKLER: How do you apply,
24 Professor, this concept of the downstream
25 elasticity affecting the upstream price in a

1 situation where you have what at least appears,
2 arguably, to be a two-sided platform in the
3 downstream market with regard to noninteractive
4 services, that is, many -- many people are
5 listening, their demand curve is a little funny
6 for us to apply because they don't pay anything,
7 it's free to them, and it's advertising supported
8 service.

9 So how, if at all, would your analysis
10 change given the fact that -- or let's assume the
11 fact that it's an ad-supported service we're
12 looking at rather than a subscription-based
13 service?

14 THE WITNESS: That's a great question.
15 So there are many ways that a price could be
16 visited on a consumer. One is you pay an
17 out-of-pocket price per hour on a subscription
18 basis. Ad-supported services can also alter the
19 price you're going to have to pay to listen to the
20 tune or to listen to this webcast from time to
21 time. The more the advertisements, the higher the
22 price; the less the advertisements, the lower the
23 price. So there's a type of an in-kind price
24 component that would be related to this type of
25 elasticity pass-through. But I agree with you, it

1 would have to be -- it would have to be converted
2 possibly.

3 The other issue is that there are
4 certain types of alternatives at the downstream
5 level, like the cost of threat of piracy or other
6 outlets, YouTube, for example, that are also going
7 to give rise to high price elasticity even if you
8 started to charge a price rather than advertising.
9 In fact, that may be one of the reasons why it's
10 hard to charge a price simply because there are
11 these outside options that downstream listeners
12 have to resort possibly to pirated content.

13 JUDGE STRICKLER: Thank you.

14 BY MR. BLAVIN:

15 Q Now, with respect to these factors you
16 just mentioned before, do you see them generally
17 in the market that we're looking at?

18 A Well, from what I understand of this
19 market, the variable costs associated with
20 licenses is, in fact, a very significant cost
21 share of the cost of the services. And to the
22 extent, then, that the downstream market does
23 exhibit these types of high price elasticities,
24 this would be one conduit where you would expect
25 those elasticities, in fact, to be passed up to

1 the demand for the input as opposed to less cost
2 intensive inputs.

3 Q Now, given these factors, would you
4 expect the price that would emerge in the upstream
5 licensing market to be comparable to the price
6 that would result in what Professors Katz and
7 Shapiro have described as an effectively or
8 workably competitively market?

9 A Well, I need to be careful here. I
10 haven't done an empirical analysis of that market,
11 but to the extent that the conditions are there,
12 and I think they are, for high elasticity
13 downstream markets to have that elasticity passed
14 up to the licensing market as a significant cost
15 share, I see a very strong tie between the
16 downstream market and the upstream market; and,
17 therefore, to the extent that downstream market is
18 also reflecting effective competition and
19 Professor Shapiro and Katz haven't really
20 precisely defined what they mean by "effective or
21 workable competition," then it would, in fact, be
22 passed back up to the demand for the inputs.

23 Q Would that still be a monopoly rate in
24 the upstream market?

25 A Again, I think we're back to this more

1 pedantic point that it may well be the only case
2 that you're the only game in town as a monopolist,
3 if you are a monopolist, but you're facing a very
4 elastic demand curve and your ability to utilize
5 that monopoly for things that we typically think
6 monopolies are -- are bad, it's going to be quite
7 limited.

8 Q Now, with respect to your third
9 criticism, in what ways is Professor Katz and
10 Professor Shapiro's economic analysis of the
11 hypothetical market inconsistent with economic
12 theory?

13 A Well, as I noted earlier, Professor Katz
14 and Shapiro don't really adopt a type of a
15 buyer/seller framework. They end up using some
16 more conventional, you know, sort of textbook
17 accounts of the markets for widgets from a sort of
18 an elementary economics class, which is fine, but
19 it does omit, I think, important things that are
20 related to this particular setting.

21 The first that I note about both of them
22 is their omission of fixed costs as a considerable
23 component of costs. I agree with them that
24 there's a large fixed cost component or quasi
25 fixed cost component to this industry, but if

1 that's the case, then pricing conditions in this
2 industry need to be attentive to fixed costs.

3 So, for example, Professor Shapiro is
4 quite fond of invoking the Lerner equation, which
5 is essentially a way of -- you know, it's
6 essentially a marginal cost pricing condition that
7 relates the elasticity of demand to your
8 price-cost markup. Well, that's essentially
9 assuming that the fixed costs are recovered
10 through operations anyway. If those fixed costs
11 are not recovered, then that company, if it priced
12 at the Lerner equation level, would be operating
13 at a loss and it would not be able to sustain it.
14 So the Lerner equation is true only insofar as the
15 company is able to recover and, therefore, ignore
16 its fixed and quasi fixed costs.

17 JUDGE STRICKLER: Assuming, then, that
18 the Lerner equation does not apply, given the
19 existence of those fixed costs and the declining
20 or marginal costs would be a zero marginal cost
21 for an incremental play, how, in such a market,
22 does the willing seller recover its fixed costs?

23 THE WITNESS: Yes, so just one fine
24 point. So there may be -- I think this has been
25 touched on before. There may be elements of

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1 opportunity costs, as well, that are part of
2 marginal costs that cause a diverge to -- diverge
3 from, say, zero.

4 But to the extent we stick with that
5 hypothetical, a supplier in that market is not
6 going to stay in the market unless it can recover
7 what is essentially its average costs. So at the
8 end of the day, you know, that supplier has got to
9 be able to recover its fixed costs, essentially an
10 average cost with a reasonable return type of
11 pricing scheme.

12 JUDGE STRICKLER: How does such a
13 willing seller recover its fixed costs given that
14 it has to do that? How does it price?

15 THE WITNESS: Yes. So it's going to
16 price -- so in the framework that I've set up,
17 it's going to be pricing by negotiation with
18 individual buyers, and the seller's willingness to
19 accept may very well be -- one of the things it
20 informs -- and this gets back to our discussion
21 earlier about, you know, what goes into that
22 willingness to accept, that may be that I need to
23 meet my average cost constraints. Fixed cost
24 recovery may be the point where, look, this is not
25 going to be a worthwhile deal for me. And that

1 may inform that seller's -- that seller's
2 bargaining or willingness to enter a deal at a
3 lower rate.

4 JUDGE STRICKLER: Would a willing seller
5 look to differing willingnesses, if you will, to
6 accept among different buyers and establish
7 different prices with regard to its individual
8 intermediate parts?

9 THE WITNESS: One thing to remember
10 about this market as opposed to -- the answer, by
11 the way, is it seems likely that they might, as
12 the buyers might as well. One thing to remember
13 in this market, unlike the market for widgets,
14 where I sell Mr. Blavin a widget and I sell you
15 another widget at a lower price, that widget
16 market may have a lot of secondary trades going
17 inside it.

18 JUDGE STRICKLER: Selling might be
19 different.

20 THE WITNESS: Yes, you might just become
21 an intermediate supplier of widgets.

22 In IP markets where there are
23 restrictions on assignment or transfer of
24 licenses, you don't have to worry about that as
25 much. So you can have a differential distribution

1 of prices. In fact, that's, in some ways, my
2 third bullet point here, that you would expect in
3 these markets to see that type of price
4 distribution based on the deals that are struck
5 between buyers and sellers, possibly with
6 differential bargaining power across those deals.

7 JUDGE STRICKLER: Would Ramsey pricing,
8 that is, pricing based on the elasticity of demand
9 of the willing buyer, the various willing buyers,
10 be applied in order to try to recover fixed costs?

11 THE WITNESS: It could be applied. But,
12 remember, one of the things that's at issue here
13 is whether this is a price-taking type of demand
14 side of the market, right? So Ramsey pricing is a
15 type of pricing formula that says I set my price
16 and I'm going to set them -- you know,
17 essentially, there's a condition on Ramsey pricing
18 on -- across different segments of the market --
19 and I'll be able to maximize my profits that way.

20 But that assumes a type of price-taking
21 behavior. That may not be what's at issue here.
22 I'm not convinced that that's what's foreshadowed
23 by the willing buyer and willing seller framework,
24 that this may be much more -- that's why I ended
25 up using a structural model, where you've got

1 individual transactions being negotiated between
2 willing buyers and willing sellers.

3 JUDGE STRICKLER: Can't you have Ramsey
4 pricing even without reducing buyers to be price
5 takers because there could be negotiations where
6 there's a determination of what the buyer's
7 willingness to pay is, and the seller has its
8 willingness to accept, and, in those negotiations,
9 each buyer comes out with its own result that
10 either -- that is no lower than its willingness to
11 pay?

12 THE WITNESS: Yes.

13 JUDGE STRICKLER: Excuse me, no higher
14 than its willingness to pay, but each one varies.

15 THE WITNESS: I'm sorry I interrupted
16 you. So that's certainly a possibility here. I
17 think Professor Katz talked about this a little
18 bit yesterday, that there may be interactions
19 between the buyer and seller in which they learn
20 about each other's willingness to pay and
21 willingness to accept, and at that point the
22 seller might think, okay, I'm going to try to get
23 as much of that buyer's willingness to pay as
24 possible. The buyer is probably, if the buyer is
25 a rational agent, thinking, I'm going to try to

1 get as much of the seller's surplus as possible.
2 And at that point we've set up a bargaining
3 problem, right, in which there's going to be some
4 division of surplus between them. If the seller
5 has all the bargaining power, that would be a type
6 of price discrimination.

7 JUDGE STRICKLER: Thank you.

8 BY MR. BLAVIN:

9 Q I think through that back-and-forth you
10 covered all of the points here, but if I'm wrong,
11 let me know?

12 CHIEF JUDGE BARNETT: May I ask a
13 question.

14 THE WITNESS: Sure.

15 CHIEF JUDGE BARNETT: By the way,
16 speaking of division of surplus, let's have a
17 moment of silence for Professor Nash. This is not
18 a widget industry. This is a creative industry.
19 If the record -- major record labels have costs,
20 fixed costs that they have to recover and they
21 decide they're not recovering them for whatever
22 reason, it's not going to stop music, right? I
23 mean, I could go record on YouTube if I could
24 carry a tune. Any artist could record in their
25 garage and deliver an MP3 to a terrestrial radio

1 station and become a star without 6 billion
2 dollars in A&R costs being sunk.

3 So if the -- I just -- I have trouble
4 with the concept of having to recover fixed costs
5 in this industry when, you know, it's not -- it's
6 not completely open to entry. On the other hand,
7 these days, it's not completely restricted to
8 entry either, and why wouldn't they just reduce
9 their costs? I guess that's the point.

10 THE WITNESS: So that's a loaded
11 question, but it's a perfectly good question. By
12 the way, thank you for acknowledging the passing
13 of John Nash. He's been a very important figure
14 in economics.

15 So within any industry, one can imagine
16 that expertise is built up in not only in finding
17 talent, which can be quite difficult, promoting
18 talent, assembling talent, recording with high
19 quality rather than garage-level recording. And
20 these are all components of what are essentially
21 recurring or quasi fixed costs.

22 It may well be the case -- in fact, it
23 probably is the case already, there's a segment of
24 the music industry, broadly defined, in which
25 people are recording things in their bedroom and

1 posting it on YouTube. But there is another
2 segment that seems to have quite high value among
3 consumers in which some of these areas of
4 expertise are, in fact, quite valuable. So if the
5 labels aren't able to recover their fixed costs,
6 do they go out of business?

7 Maybe in the extreme they would, but
8 they would certainly dial back those fixed costs,
9 and that would give rise to fewer investments in
10 the development, the assembly, the recording, the
11 promotion of some of these talents that presumably
12 are viewed as quite attractive to the public.

13 You back up even further and ask, well,
14 how does this affect my investment in deciding to
15 become a classical guitarist, which I almost did,
16 and versus going to a Ph.D. program in economics?
17 Then that can also have feedback effects, right?
18 That's, in some ways, just a microcosm or a
19 macrocosm of the idea of why intellectual property
20 rights have value.

21 So I think I get your point, and I agree
22 with it so far, but to the extent that this is a
23 segment of the music industry that involves
24 particular skills and particular investments that
25 are really hard to assemble, I don't think you

1 replicate that by sitting in your garage.

2 CHIEF JUDGE BARNETT: Thank you.

3 BY MR. BLAVIN:

4 Q So with respect to your final point,
5 Professor Katz and Professor Shapiro maintain that
6 the interactive set of agreements are not proper
7 benchmarks here because the major labels are
8 must-haves in the interactive space and that the
9 bargaining dynamic that would give rise to those
10 agreements is inappropriate for setting the
11 statutory rate in the noninteractive space.

12 Do you believe that the bargaining
13 dynamics that exist in the interactive space would
14 not also exist in the noninteractive space?

15 A So I don't find that distinction
16 particularly compelling for a couple different
17 reasons. The first is that to the extent that the
18 labels, the majors, are must-haves in the
19 interactive market, I don't see much of a reason
20 to believe that they're any less must-haves in the
21 noninteractive market. I think multiple times in
22 his testimony or deposition, Professor Katz
23 himself has conceded this. Professor Shapiro
24 adverts to -- through his steering experiment
25 arguments to a claim that maybe the majors aren't

1 must-haves in the noninteractive market because,
2 according to him, Pandora was able successfully to
3 steer away from major label catalogs. But even
4 that steering experiment is not quite the
5 experiment that you would want to determine
6 whether the label was a must-have.

7 In none of the McBride and Shapiro
8 experiments, at least that I'm aware of, was
9 steering experimented with to the point of
10 100 percent, which is really the threat that you
11 would have to be making, we're going to drop your
12 label entirely. Moreover, it's -- from, I think,
13 both versions of these experiments, one sees that
14 listenership starts to fall off at 30 percent
15 levels or even before that and, I think, in
16 another one of the experiments, when steering away
17 from a major.

18 So the steering experiments don't quite,
19 I don't think, give you what you need to determine
20 that the majors are not must-haves in the
21 interactive -- in the noninteractive market any
22 more than they are in the interactive market.
23 Moreover, as I mentioned in my report, Professor
24 Shapiro did not conduct a similarly situated horse
25 race in the interactive market. If one were

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1 interested in trying to get the extent to which
2 there was steering possibilities between the two,
3 or differences, I would want to see an
4 apples-to-apples comparison.

5 And then, finally, you know, there's
6 this point that's come up a few times,
7 particularly in the context of the Merlin-Pandora
8 deal, that steering -- an affirmative obligation
9 to steer just can't be implemented on a
10 market-wide basis. It's just not possible for a
11 service to say I'm going to steer listenership
12 towards each label that I contract with. Whenever
13 you steer toward one label, you have to be
14 steering away from someone else. And, therefore,
15 it's almost like a Lake Wobegon effect, that not
16 everyone can be above average, not everyone can
17 receive steering.

18 JUDGE STRICKLER: But isn't it the case
19 that a service, a noninteractive service can
20 threaten to steer to each of the majors, leaving
21 the independents out for the moment, and each
22 major would then have to, in bargaining theory,
23 have to determine, do I want to hold fast and not
24 cut my rate in the hopes of getting more -- and if
25 I don't cut and one or both of the other majors do

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1 cut, now I will lose the market because they
2 recognize, just as you do, that you can't -- you
3 can't have more than 100 percent of the music
4 played?

5 So, as a consequence, steering can be a
6 threat. I believe Dr. Shapiro said, therefore,
7 once you have the opportunity to steer, you might
8 actually see no steering at all because everyone
9 would bid -- you can almost think of it, perhaps,
10 as an auction. I want your best deal by midnight
11 on Friday, and then I'll decide whether or not, if
12 I'm Pandora, to whom I'm going to steer more and
13 to whom I'm going to steer less, then everybody
14 has to scratch their heads and hopefully not
15 explicitly collude and decide what it is that they
16 want to do. Isn't that dynamic of steering
17 sufficient to influence price?

18 MR. BLAVIN: I think this is the next
19 slide so we can move to that.

20 JUDGE STRICKLER: But I can't wait.

21 MR. BLAVIN: We're right here. We're
22 there.

23 THE WITNESS: You need not wait.
24 Just-in-time delivery, okay?

25 So, yes, so I'm aware -- I cuddled up

1 with Dr. Shapiro's trial testimony transcript a
2 few nights ago and saw that he went through this.
3 It was probably not the best reading option that I
4 had for the evening --

5 JUDGE STRICKLER: We won't tell him.

6 THE WITNESS: -- but I went through it
7 nonetheless. And he makes this argument. Another
8 sort of econo head way to put this is that the
9 threat to steer away would be an off-equilibrium
10 threat. You make the threat and you wouldn't have
11 to follow through on it.

12 Now, one thing that's really incredibly
13 important if -- it's conceivable that a threat
14 that you don't have to follow through on could
15 have price effects, but there are a couple things
16 that have to be present before that's true. First
17 of all, it has to be a credible threat. You have
18 to be able to say, look, I am -- you know, if your
19 bluff gets called and you don't negotiate a lower
20 rate, then they're going to have to turn around
21 and actually start steering against you.

22 It appears from the margins that we see,
23 at least in those McBride-Shapiro experiments that
24 at some point you're not going to be able to do
25 that at 100 percent. At some point listenership

1 is going to fall off a lot.

2 JUDGE STRICKLER: Then you're in
3 agreement with Professor Shapiro in that regard
4 because he doesn't say you can steer 100 percent
5 away. He's relying on Dr. McBride's studies where
6 the majors, so they claim, 15 percent, no effect;
7 30 percent, perhaps you're starting to see a
8 falloff. So no one is claiming -- it seems like
9 the criticism that you can't steer 100 percent
10 away from a label is a bit of a straw man argument
11 because nobody is addressing that.

12 THE WITNESS: Good point. So let me
13 turn the tables a little bit. So suppose that I
14 were negotiating, let's say, a service like
15 Pandora, and the threat was, we're going to steer
16 away from you at 25 percent, and we're willing to
17 bear the cost to do it.

18 JUDGE STRICKLER: Who's the "we" now?
19 Pandora?

20 THE WITNESS: Excuse me, Pandora. We're
21 willing to bear the cost to do it.

22 JUDGE STRICKLER: So I understand your
23 hypothetical, what costs would they be bearing?

24 THE WITNESS: So the cost of, say,
25 falloff of listenership if they start steering.

1 JUDGE STRICKLER: So we're assuming in
2 this hypothetical a falloff of listenership at
3 25 percent, steering away from, say, Sony, for
4 example.

5 THE WITNESS: Exactly.

6 So a couple issues that may come into
7 play here. We don't know for sure whether the
8 threat to steer, if carried out, and then
9 publicized, would, in fact, have the same
10 repercussions as in the Pandora experiment. So
11 one thing that's critical about the Pandora
12 experiment is the end users. They weren't aware
13 that they were steering against. To the extent
14 that the end users are informed -- and I can tell
15 you a major label might have an incentive to start
16 informing users that this is happening -- then
17 that could be a problem.

18 Second, think about this in the
19 hypothetical market where there is no background
20 statutory rate. That label might say, okay, if
21 you're going to do that, we may just walk away,
22 right? We can force you to steer away from us at
23 100 percent.

24 JUDGE STRICKLER: That's a function of
25 the major's market power, the ability to walk

1 away, right?

2 THE WITNESS: It might be. But
3 Professor Shapiro has talked about steering
4 ability as a credible threat. I think that's part
5 of the question of credibility. I think the last
6 two points that are particularly important is that
7 in the context that we sit today, when a provider
8 like Pandora says, well, we're going to threaten
9 to steer against you, there is essentially a
10 safety net that they are working with, all right?
11 If I steer against a particular major and I'm
12 worried, well, they're going to take it out of me
13 when I negotiate a license with them or they're
14 going to refuse to license to me, I actually have
15 the safety net of the statutory license in the
16 background.

17 So to the extent that that safety net is
18 providing the type of ammunition to threaten to
19 steer against, I can always get the majors on the
20 statutory license, then that probably shouldn't be
21 what we're considering when we consider the
22 hypothetical market in the absence --

23 JUDGE STRICKLER: I was just going to
24 say, we're talking about the hypothetical market.

25 THE WITNESS: Right.

1 JUDGE STRICKLER: In a situation like
2 that, the only way that Sony could say you're only
3 going to place my music at 75 percent of the rate
4 that you usually played it before, I'm taking --
5 the expression I used before with someone else --
6 taking my bat and ball and I'm going home and
7 you're not getting any of my music. They can
8 afford to do that because they have a large
9 segment of the market. By contrast, an
10 independent might not have the same ability to do
11 that because it would harm them more.

12 THE WITNESS: Well, once again, I'm
13 responding to Professor Shapiro's assertion, which
14 I'm not convinced of, that this steering threat is
15 going at the end of the day going to be a credible
16 threat and that the noninteractive market is any
17 different than the interactive market. So to the
18 extent that this is a plausible line of reasoning,
19 which I think it might be, I think that's another
20 reason to think that the interactive and
21 noninteractive markets just may not be that
22 different from one another.

23 Then the last point is that the
24 negotiated transaction that Professor Shapiro has
25 proffered is, in fact, not one of these

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1 transactions that is either negotiated in the
2 shadow of a threat to steer away or negotiated
3 with an undertaking to steer away. It's in the
4 opposite direction. This is a promise, in fact, a
5 contractual obligation to steer towards Merlin as
6 opposed to away from Merlin. Not only does that
7 give rise again to this question of the Lake
8 Wobegon effect, but the steering obligations, the
9 guaranties and other aspects of that deal would
10 also be something that presumably would be of
11 value.

12 I know there's some dispute about
13 whether Professor Shapiro has valued them
14 appropriately, but they would seem to have some
15 value, some option value, some insurance value,
16 and that could be animating part of the lower
17 price that Merlin has negotiated.

18 JUDGE STRICKLER: You mentioned before
19 something very particularly interesting, and that
20 was that if Sony, for example, was played less
21 pursuant to some sort of steering strategy by
22 Pandora, it would not necessarily sit back quietly
23 and allow that to happen, and other services that
24 might not be doing it, along with Sony, would be
25 happy to broadcast the fact you're not getting the

1 music you want, you're getting music they can
2 afford or words to that effect.

3 What I was struck by is that when we
4 talk about steering, that door is always open. We
5 never go into closed session. It was never
6 considered confidential. Pandora is always happy
7 to speak out loud about this steering. So,
8 presumably, they're not particularly concerned
9 about the repercussions because they're happy to
10 make it open and notorious that the steering is
11 occurring, presumably, along with, assuming the
12 strategy works and they can get overall lower
13 rates, they could pass that along to, well, to the
14 small group of people who subscribe at lower rates
15 or charge less for advertising or play fewer
16 advertisements, enhance their listenership.

17 So doesn't it seem like, it might not be
18 correct, it's a rational business strategy to
19 undertake?

20 THE WITNESS: It's a fair point to make.
21 One thing I will note, however, is that the
22 steering experiments that Dr. McBride and
23 Professor Shapiro talked about were randomized,
24 single-blinded experiments. So it may be possible
25 to learn that some steering is going on for six

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1 weeks or -- 13 weeks, but not necessarily know
2 whether it's going to be something that -- am I
3 part of the treatment group, am I a part of the
4 placebo group of this experiment. So I think
5 that's a little bit different than a business
6 undertaking that we are systematically steered
7 away.

8 Now, to be sure, when you're facing
9 differential prices, that can have an effect on
10 utilization. But the steering experiments
11 themselves, I think it's sort of critical that the
12 public didn't know about it, at least at that
13 level, at that degree of granularity.

14 JUDGE STRICKLER: Thank you.

15 BY MR. BLAVIN:

16 Q Now, if Pandora threatened to steer
17 against a label like Sony, would it matter what
18 other options were available to the label to reach
19 those same listeners?

20 A Yes, I think that we talked a little bit
21 about this before, but one option open to the
22 label potentially would be to say, okay, we're
23 going to sponsor another noninteractive service or
24 join forces with another noninteractive service
25 that is going to be in a position not to threaten

1 to steer. So that may also undermine the
2 credibility of the steering threat.

3 MR. BLAVIN: Thank you. No further
4 questions.

5 CHIEF JUDGE BARNETT: Thank you.

6 Mr. Ebin.

7 MR. EBIN: Would you like me to start?

8 CHIEF JUDGE BARNETT: Yes.

9 MR. EBIN: We have a few -- just one
10 binder.

11 CROSS-EXAMINATION BY COUNSEL FOR PANDORA

12 BY MR. EBIN:

13 Q Good morning, Professor Talley. Barely.

14 A Good morning, barely.

15 Q Nice to see you again.

16 A Nice to see you, Mr. Ebin.

17 Q As I know you know, I'm Jacob Ebin. I'm
18 representing Pandora Media in this proceeding. I
19 would like to begin by exploring some of the
20 factual foundation for the opinions you offer in
21 your written rebuttal testimony.

22 In the course of preparing your written
23 rebuttal testimony, you never spoke with anyone at
24 SoundExchange, correct?

25 A I did not.

1 Q And you never spoke with anyone at a
2 record label, correct?

3 A Not in the context of this retention.

4 Q And also in the course of preparing your
5 written rebuttal testimony, you never spoke with
6 anyone at an interactive service.

7 A I did not.

8 Q And you never spoke with anyone at a
9 noninteractive service, correct?

10 A That's correct.

11 Q Now, the entirety of the materials you
12 relied upon in preparing your written rebuttal
13 testimony are either specifically referenced in
14 your written testimony or listed in the materials
15 relied upon list that you have at the back of your
16 testimony, correct?

17 A I believe so, yes. Yes.

18 Q That's what you testified to at your
19 deposition.

20 A Yes, I believe so.

21 Q Let's take a look at that materials
22 relied upon list. It's at the very back of your
23 testimony at the pages SX 19-88 through 91. It
24 should be in that cross binder behind the tab SX
25 Exhibit 19, all the way at the back of that.

1 A Okay, yes.

2 Q Are you with me?

3 Now, let's start with this first section
4 here which you labeled as CRB materials.

5 A Yes.

6 Q Now, you would agree with me that only
7 two of the list of documents in this section are
8 from this proceeding, correct?

9 A I believe that's correct, yes.

10 Q One of those is the order dismissing the
11 petition to participate of Triton Digital?

12 A I believe that's correct, yes.

13 Q The other, as you clarified in the
14 errata sheet to your deposition, the notice
15 announcing commencement of this proceeding,
16 correct?

17 A I believe that's right, yes.

18 Q But at the time of your deposition, you
19 weren't able to identify what that document was,
20 were you?

21 A I think it was -- the reference to it
22 was unclear, but we clarified -- checked and
23 clarified it, yes.

24 Q But when you were asked at your
25 deposition what that document was, you were not

1 able to identify it.

2 A Someone asked me what this document was
3 off of this list and I couldn't remember which one
4 in particular it was.

5 Q Right.

6 And the remainder of the documents
7 listed in your materials relied upon list included
8 an academic book, some academic articles and
9 handful of online articles from Tech Crunch,
10 Digital Music News, MacRumors, CNET, and Time, and
11 then a few statutes, and the closing statement
12 from the FTC regarding its review of Universal's
13 acquisition of EMI; is that right?

14 A That appears to be right, yes.

15 Q So there's not a single item in your
16 materials relied upon list that was produced by
17 any party in this proceeding, correct?

18 A Well, I have reviewed the reports of
19 Professors Shapiro and Katz. Those are discussed
20 at length.

21 Q But not a single document produced as
22 part of the discovery in this proceeding.

23 A Well, to the extent -- that's not
24 necessarily the case because Professor Shapiro and
25 Katz had items associated with discovery that I

1 was reviewing as well.

2 Q Putting to one side their actual
3 testimony, there's not a single item in this
4 materials relied upon list that was produced in
5 discovery in this proceeding, is there?

6 A Well, so let me be -- so in reading
7 various depositions --

8 Q Professor, I'm sorry, I'm just focused
9 on the materials relied upon list.

10 A I get it.

11 Q There was not a single document that was
12 produced in discovery in this case that's listed
13 on this list.

14 A In this list, that's correct.

15 Q Now let's turn to the documents you
16 reference in your written rebuttal testimony.
17 Other than the actual written testimony that
18 you've reviewed, the only documents produced in
19 this proceeding that you reference are the
20 Pandora-Merlin agreement and a single chart
21 showing the results of an early steering
22 experiment conducted by Pandora, correct?

23 A You know, if you want to point out
24 places, that's fine.

25 Q I can represent to you that I looked and

1 a colleague of mine looked and we are not able to
2 identify a single other document produced in this
3 proceeding other than the two that I just
4 mentioned.

5 A So are you -- so you're cabining again,
6 say, the expert reports of Professor Shapiro,
7 Katz, the experts.

8 Q Professor Shapiro and the Katz testimony
9 and the McBride testimony.

10 A And the appendices to those that are, in
11 many cases, quite copious.

12 Q Yes, putting to one side the actual
13 pieces of testimony you reviewed, the other
14 discovery materials, the only thing that you
15 reference in your report are the Pandora-Merlin
16 agreement and the single chart showing the results
17 of an early steering experiment, correct?

18 A So I will take your representation. One
19 thing we discussed I think in the deposition is
20 there were later contracts that were made
21 available that I also reviewed, the Apple
22 contracts, the Pandora-Merlin agreement.

23 Q You reviewed those Apple contracts,
24 though, after your written rebuttal testimony was
25 submitted.

1 A That's correct.

2 Q I'm just questioning you on what's in
3 your written rebuttal testimony.

4 A Right.

5 Q In preparing your written rebuttal
6 testimony, you did not examine any of the
7 agreements between interactive services and record
8 labels, did you?

9 A Once again, I reviewed the other expert
10 reports, but -- and to the extent that those
11 expert reports engaged with them, I picked up from
12 those reports and appended to them some of those
13 pieces of information.

14 Q You didn't look at the actual agreements
15 themselves, correct?

16 A I'm not sure about that one way or the
17 other. I'm trying -- I can't remember whether
18 they were appended to -- I have seen them. I've
19 gone through many of them, but I can't remember
20 whether they were at the time I wrote this report
21 appended to Professor Shapiro's report or not.

22 Q Let's take a look at your deposition.
23 That's the first tab in your binder there.

24 A Sure.

25 Q Turn to page 139.

1 A All right.

2 Q Do you see at line 16 -- I'm sorry, I'll
3 give the judge a moment to catch up. I apologize
4 for going too quickly.

5 JUDGE STRICKLER: Thank you.

6 Q Do you see at line 16 on page 139,
7 question, "Have you looked at the economic terms
8 of any of the contracts negotiated between
9 interactive services and record labels?"

10 Answer, "I believe I've seen summaries
11 of them. I haven't, sort of, gone through the
12 contract terms in the way that I have with a
13 couple of noninteractives."

14 Did you give that testimony at your
15 deposition?

16 A Yes, I did, but notice the exposure I
17 had to those was also through Professor
18 Rubinfeld's extensive own report.

19 Q I believe you then clarified that you
20 looked at summaries of the economic terms as
21 prepared by Professor Rubinfeld, correct?

22 A The descriptions and appendices of his
23 report.

24 Q Again at your deposition you were not
25 able to name a single interactive service other

1 than Spotify, correct?

2 A You know, I think that I can't remember
3 one way or another.

4 Q We can take a look.

5 A Okay.

6 Q Turn to page 70 of your deposition.
7 This is line 11.

8 A All right.

9 Q Question, "Can you name any interactive
10 webcasting services?" Answer, "I think Spotify
11 is, you know, it's got a version. It's got a
12 platform that's an interactive platform."

13 "Can you name any others?"

14 Answer, "I think that there are others.
15 I think that, you know, there are many that have
16 multiple platforms, but I didn't do an inventory.
17 I think I've seen a list of them."

18 Question, "As you sit here today, can
19 you name any other webcasting services other than
20 Spotify?"

21 Answer, "I think that there would be
22 others, but I would have to look to documents that
23 I was reviewing."

24 Did you give that testimony at your
25 deposition?

1 A I did.

2 Q You also, in your preparation for your
3 written rebuttal testimony, did not review the
4 agreements between iHeartMedia and record labels,
5 correct?

6 A Once again, I reviewed the report of
7 Professors Fischel and Lichtman. There was an
8 extensive analysis of those contracts.

9 Q But you didn't look at the contracts
10 themselves, correct?

11 A I can't remember whether they were
12 appended or not at the time.

13 Q And the only noninteractive webcasters
14 that you were able to name at your deposition
15 until prompted by Mr. Joseph were Pandora and
16 iHeartRadio, correct?

17 A I assume if you'll so stipulate, sure.

18 Q While you did look at the Pandora-Merlin
19 agreement, you didn't spend any time reviewing the
20 documents memorializing any of the negotiations
21 between Pandora and Merlin, did you?

22 A Once again, I definitely came across
23 discussions, reports of them. I don't believe --
24 I don't know whether I reviewed them at the time.
25 I think, again, the same stipulation as before.

1 Q To save some time.

2 A Right.

3 Q More generally, you did not review any
4 documents memorializing the negotiations between
5 record labels or record collectives in any
6 streaming services, correct?

7 A Again, same stipulation, I think.

8 Q Let's take a look at what you said in
9 your deposition on this.

10 A Sure.

11 Q I'm at page 288, line 5. Are you with
12 me?

13 A Uh-hmm.

14 Q Question --

15 A Excuse me. Yes.

16 Q -- from Mr. Huppert, "Did you review any
17 evidence associated with the negotiations
18 surrounding any of the agreements that have been
19 proposed as benchmarks in this proceeding?"
20 Mr. Choudhury objected.

21 Answer, "Yes, I think that, you know,
22 certainly I have seen documents related to those
23 negotiations, but I have not taken any appreciable
24 time, if time at all, sort of, looking through
25 negotiation documents, drafts of letters, markups

1 of letters, strategy documents and things like
2 that."

3 Question, "So just to be clear, you have
4 not reviewed those kinds of documents that you
5 just listed?" Another objection from
6 Mr. Choudhury.

7 Answer, "Yes, so I have definitely, sort
8 of, reviewed the records that I have seen. There
9 have been some reference to those sorts of
10 negotiations. Certainly I have seen some of those
11 references, but I have not taken a close view at
12 negotiating documents in this case."

13 Is that the testimony you gave?

14 A Yes, but remember the nature --

15 Q Is that the deposition testimony you
16 gave?

17 A Well, I'm trying to answer your
18 question, Mr. Ebin.

19 Q It seems like a yes or no question.

20 A It is the deposition testimony that I
21 gave, but there is a caveat.

22 Q The answer to my question, then, is yes.
23 Your counsel will have an opportunity to follow up
24 with you if he thinks it's appropriate.

25 Now, in your discussion with Mr. Blavin

1 earlier today, you discussed how downstream
2 competition might impact rates negotiated between
3 interactive services and labels in the upstream
4 market. Do you recall that?

5 A I do.

6 Q You have done no empirical analysis to
7 ascertain whether and the degree to which that
8 downstream competition is, in fact, impacting the
9 upstream negotiations, have you?

10 A Can you repeat that question, sir?

11 Q You have done no empirical analysis to
12 ascertain whether and the degree to which that
13 downstream competition is, in fact, impacting the
14 upstream negotiations, have you?

15 A So as I noted to you, I think, in the
16 deposition, my remit as an expert in this case is
17 as a rebuttal to Professor Shapiro. My criticism
18 of him is that he has not done that -- one of my
19 criticisms is that he has not done that either and
20 yet purports to make claims about the market
21 structure of the upstream market.

22 Q Just answer my question, you have not
23 done any empirical analysis, correct?

24 A I have criticized Professor Shapiro for
25 not doing it himself. I have not offered an

1 affirmative suggested rate and, therefore, my
2 criticism of Professor Shapiro stands as is, yes.

3 Q You have not attempted in your written
4 rebuttal testimony to calculate any elasticity of
5 demand whatsoever, have you?

6 A I will give the same answer I did to
7 your last question, I was a rebuttal expert to
8 Professor Katz and Shapiro who themselves were not
9 trying to or did not attempt to compare
10 elasticity, and not withstanding the fact that the
11 Lerner equation was so central to the analysis of
12 Professor Shapiro. So I was brought in as an
13 expert rebuttal witness and I rebutted what I saw.

14 Q So the answer to my question is no, you
15 have not done any empirical analysis?

16 A Again, within the ambit of how I was
17 retained as an expert, I did not view that as part
18 of my charge.

19 Q You have not undertaken any
20 investigation of the major record labels and how
21 they've acquired and exercised their potential
22 monopoly power so as to be in any position to
23 conclude that what we observe is a "sophomore Econ
24 101 perspective of monopoly," have you?

25 A Well, that's not entirely the case. I

1 do did teach mergers and acquisitions, and those
2 deals, in fact, are part of the cannon of that
3 class. So it's -- so for the purposes
4 specifically for this retention, the Universal/EMI
5 closing documents are part of what my listed
6 documents are, so that's not entirely true there
7 either. But it's essentially part of the job of
8 teaching in a class like that, to study
9 acquisitions.

10 Q So the sole basis from this proceeding
11 that you relied on to conclude what you did in
12 your colloquy with, I believe, Judge Strickler
13 earlier was the closing statement from the FTC?

14 A That's incorrect, Mr. Ebin. What I'm
15 relying on, along with all these other things, is
16 my experience as an academic and researcher in
17 this field and professor in this field.

18 Q In your discussion earlier with Judge
19 Strickler, you mentioned that you would want to
20 know how many buyer/seller payers, I think your
21 word is dyads, actually availed themselves of the
22 Web II rates, correct?

23 A That would be one of the pieces of
24 information that would be interesting.

25 Q Are you aware of what the judges, in

1 fact, concluded on this topic in the Web III

2 Remand decision?

3 A I've read the Web III Remand decision.

4 Q Nothing comes to mind as to what the
5 actual conclusion is?

6 A You might want to refresh my memory.

7 Q We can take a look at it on our lunch
8 break.

9 MR. EBIN: Actually, Your Honors, I'm
10 changing topics now if you would like to take a
11 break for lunch or if you'd like me to continue.

12 CHIEF JUDGE BARNETT: Oh, it's
13 lunchtime. I'm so fascinated by all of this
14 testimony. We'll be at recess for an hour.

15 (A lunch recess was taken.)

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1 AFTERNOON SESSION commencing at 1:08 p.m.

2 CHIEF JUDGE BARNETT: Good afternoon.

3 Please be seated.

4 You may continue, Mr. Ebin.

5 MR. EBIN: Good afternoon.

6 BY MR. EBIN:

7 Q Good afternoon.

8 A Good afternoon.

9 Q Let's talk about your model. To run the
10 simulations in your written rebuttal testimony,
11 you need to come up with numbers for what you term
12 as the five critical parameters; is that correct?

13 A Let me back up a little bit. For the
14 structural analysis, there were two parts. There
15 was an analytic part and then an illustration
16 through the simulation.

17 Q My question is to run the simulations
18 you presented in your written rebuttal testimony,
19 you needed to come up with numbers for your five
20 critical parameters, correct?

21 A The simulation portion, in order to do a
22 simulation, it has to make an assumption about a
23 parametric environment. In my case, I made that
24 assumption about the bivariate normal that has
25 five parameters, correct.

1 Q So the answer to my question was yes,
2 correct?

3 A I believe the answer is yes.

4 Q The numbers you used for those five
5 critical parameters are listed in your
6 footnote 74?

7 A I believe so.

8 Q I see.

9 Now, ideally, you would like to estimate
10 these five critical parameters from observed
11 real-world data, correct?

12 A It would depend on what you were going
13 to use them all for. In my case I was using them
14 to critique Professors Katz and Shapiro.

15 Q So it was your view you did not need any
16 real-world data and it would not be useful at all?

17 A Like I said, Mr. Ebin, it would depend
18 on what one was trying to use the underlying model
19 for. If it were to point out what was a
20 conceptual flaw in the reasoning of Professors
21 Shapiro and Katz, that reasoning or that flaw
22 might emerge naturally without doing any
23 calibration at all. In some circumstances --
24 that's actually what happened here. In some
25 circumstances, the question is more complex and

1 you would actually need to do a calibration with a
2 bunch of different parameters. And then in the
3 extreme case, if one were attempting to formulate
4 an affirmative recommendation of rates and proffer
5 them, then to take -- the approach that I employed
6 might be used, but it would then require a
7 calibration.

8 Q So I think you just acknowledged, and I
9 think you acknowledged earlier today as well, you
10 didn't do any real-world analysis to calibrate
11 your model, correct?

12 A I guess I would push back a little bit
13 on real-world analysis. I did not try to
14 calibrate the model with market data, that's
15 correct.

16 Q So you didn't use any real-world data to
17 calibrate your model.

18 A Well, once again, I'm going to push back
19 on this a little bit. The formulation of the
20 bargaining framework was based on my understanding
21 of the record as it's developed. The theoretical
22 part that makes no distribution or assumptions of
23 it in a continuous distribution lays out most of
24 the conclusions of the crowding out and the
25 selection bias effect without any calibrated

1 parameters whatsoever. So one way to view the
2 simulations in the text is a way to distill this
3 down in a way that people can sort of see what's
4 happening as opposed to showing an interval and
5 saying that it's increasing in a particular
6 parameter.

7 Q Now, as you put it at your deposition,
8 to run your simulations you simply posited some
9 numbers, correct?

10 A One has to posit some initial numbers.
11 That's true in any -- even if one were to go
12 forward with a calibration exercise, the standard
13 way to do that is to posit some initial numbers
14 and then update it in what is essentially a data
15 fitting enterprise.

16 Q But you didn't do any of that data
17 fitting enterprise as you just discussed, correct?

18 A As I testified earlier this morning in
19 my direct examination, it was unnecessary given
20 the ambit of my rebut as an expert, as a rebuttal
21 expert to Professors Katz and Shapiro.

22 Q In your model you pair a randomly
23 selected buyer and a randomly selected seller,
24 correct? That's how it works?

25 A Not just one.

1 Q Each draw is -- in your simulation you
2 pair many, many random selected buyer, but in each
3 instance of the draw there is one random buyer and
4 one random seller pulled, correct?

5 A So the buyer and seller are drawn from
6 this distribution, and that could be in the
7 general case as well, and in the bivariate normal
8 simulations that are used to illustrate the more
9 general argument, they are drawn from a
10 distribution that has some -- potentially, they
11 have some correlation, but yes, they are plucked
12 out of this distribution as a pair, and they're
13 randomly distributed around.

14 Q And that buyer and that seller then
15 negotiate over something? I think you used -- in
16 your deposition, at least, you referred to it as a
17 per-play rate.

18 A Well, the rate -- there are
19 essentially -- I think in my deposition I used the
20 bundles of rights that are being sold. I think,
21 in fact, maybe even in my discussion with you in
22 my deposition this could have multiple features
23 associated with it. A price would eventually
24 emerge and the model expresses them in terms of
25 per-play rates, but, as has happened in this case

1 as well, one can formulate different types of
2 payment. And to compare apples to apples, you
3 have to do it on some basis. So it does this in
4 the sense of per-play rates.

5 Q Recognizing there's a lot of things you
6 could have done, what you represented in the model
7 is that the buyer and seller would be negotiating
8 over a per-play rate, correct?

9 A That's one way to express a price, but,
10 remember, if there are -- I mean, another way is
11 the aggregated amount of money that's going to be
12 paid. So, functionally, yes, this is -- this is a
13 sufficient way to describe those simulations, but
14 the bargaining environment is more general than
15 that.

16 Q Now, the end result of this hypothetical
17 negotiation between this randomly plucked buyer
18 and randomly plucked seller is either that a deal
19 is struck, and that's dictated by the five
20 critical parameters in your simulation, or there's
21 no deal, correct?

22 A Not quite. Whether a deal is struck is
23 going to be determined by whether the buyer's
24 willingness to pay exceeds the seller's
25 willingness to accept.

1 Q Isn't that dictated by the five critical
2 parameters?

3 A It is not dictated. Those parameters in
4 the simulations, again, that illustrate the more
5 general argument, are essentially probabilistic
6 parameters. So there's a probability that is
7 dictated by that distribution that the buyer may
8 value more than the seller, a probability that the
9 buyer doesn't value more than the seller and
10 there's no deal to be had there. So that's the
11 nature of the enterprise.

12 So it is true to say that the parameters
13 in the simulation portion of my analysis helps
14 shape what types of dyads we are likely to draw
15 out of the population. They do not foreordain
16 whether there's a deal to be had or not. That's
17 essentially a deliberately designed-in
18 randomization process.

19 Q There aren't any other parameters other
20 than these five critical ones that are entering
21 into your model, correct?

22 A That's incorrect. In fact, the general
23 model at the end does not use --

24 Q I'm sorry, I'm just referring to your
25 simulations.

1 A That's not the model, the simulations?

2 Q The simulations.

3 A I see. So the simulations are based on
4 a bivariate normal distribution, which is fully
5 defined by five parameters.

6 Q Now, the outcome of the negotiations
7 between a given buyer-seller pair, or dyad, as
8 predicted in your simulations, is not impacted in
9 any way by prior or subsequent negotiations
10 between another buyer-seller pair, is it?

11 A Well, these buyer-seller pairs are drawn
12 out independently, and one way to view it is
13 they're drawn out, you know, sort of all at the
14 same time, and they're negotiating with one
15 another. So they may have conjectures about what
16 contracts are being reached elsewhere and that can
17 inform the willingness to pay or willingness to
18 accept of the buyer and seller.

19 Q So let's take a look at your deposition
20 to see what you said when I asked you that
21 question a few weeks ago. If you could turn to
22 page 160, line 24.

23 A I'm there.

24 Q I'm just giving the judges a moment to
25 get there as well.

1 JUDGE STRICKLER: Thank you.

2 Q Now, at the bottom of 160 at line 24, I
3 asked you the following question, "So a rate
4 negotiated by one dyad will have no effect on the
5 rate that's ultimately negotiated by any other
6 dyad; is that right?" Mr. Choudhury objected,
7 "You mean within the model?" To Mr. Choudhury, I
8 responded, "Within the model." Then you answered,
9 "Yeah. So within the model, the rate that's
10 negotiated is, you know, essentially out of these
11 independent pairings of buyers and sellers and
12 that there is not modeled into this, although I
13 think it probably could be adapted to do this, I
14 guess, a pricing externality associated with the
15 price that we reach somehow affects the valuation
16 of the other people have in that transaction. It
17 would be possible to work that in. It would be
18 somewhat more complicated, but a simulation
19 environment certainly could do that."

20 Is that the testimony that you gave?

21 A Well, it depends on the understanding of
22 the context. So I --

23 Q Is that the testimony that you gave at
24 your deposition?

25 A Well, let me make sure that I'm clear

1 about this. It's not inconsistent with what I
2 just said.

3 Q I didn't ask you that question. I just
4 asked, is this the testimony that you gave at your
5 deposition?

6 A I understand, but the context in which
7 we were making -- having this discussion is one
8 way that the model can play out. So let me -- I'm
9 going to try to answer this.

10 MR. EBIN: Your Honors, if I could just
11 get an instruction for the witness to answer the
12 question.

13 CHIEF JUDGE BARNETT: Dr. Talley, it's a
14 yes or no question.

15 A So that is a correct reading of the
16 transcript at the deposition.

17 Q Thank you. And your simulations also do
18 not account for the possibility that a rate
19 negotiated between a buyer and seller might be
20 used in a future CRB proceeding as a benchmark,
21 correct?

22 A Well, we had a discussion about this.
23 My assessment was that if there were a sufficient
24 number of these, that it wasn't clear that that
25 needed to be worked into the model.

1 Q But it's not something that you've
2 worked in your model, correct?

3 A Yes, I think there are reasons not to,
4 though. It would depend on the context.

5 Q But, again, you didn't do that, correct?

6 A It's not worked in the model, right.

7 Q Thank you.

8 Let's turn to a hypothetical.

9 A Sure.

10 Q Suppose -- and this will be a variation
11 on some of the demonstratives you walked through
12 with Mr. Blavin earlier this morning. Suppose all
13 of the buyers in my hypothetical have a
14 willingness to pay of up to 15 cents. I'm just
15 going to use the shorthand "15" so we can avoid
16 zeros and decimal points, .0015 dollars, but I'll
17 just say 15 cents for present purposes.

18 A So let me make sure that I understand
19 the hypothetical. So are you saying that
20 15 cents -- I'm going to use your same, I don't
21 know, multiplication by a hundred, I guess.

22 Q Fair enough.

23 A -- that that is the upper bound of
24 buyers' willingness to pay?

25 Q Yes.

1 A But there's a distribution of
2 willingness to pay in there? Is that a ceiling, I
3 guess?

4 Q All of buyers have a willingness to pay
5 at 15 cents.

6 A So buyers are not heterogeneous.

7 Q Exactly.

8 A So buyers are all identical in your
9 setting.

10 Q In their willingness to pay.

11 A Okay.

12 JUDGE STRICKLER: I just want to make
13 sure of your hypothetical. Did you say all buyers
14 have a willingness to pay up of to 15 cents --

15 MR. EBIN: Yes.

16 JUDGE STRICKLER: -- or of 15 cents?

17 MR. EBIN: I understood, based on my
18 conversation with Professor Talley at his
19 deposition that, in his view, those were the same
20 thing.

21 THE WITNESS: No, that's not my
22 understanding. That's why I was confused as well.
23 When you say "up to," that sounds like it's a
24 range and there might be some distributions or
25 heterogeneity within that range.

1 Q Let's simplify things. We'll just say
2 of 15 cents.

3 A Exactly 15 cents, so no buyer
4 heterogeneity.

5 Q And all sellers have a willingness to
6 pay of 5 cents -- sorry -- willingness to accept
7 of 5 cents.

8 A Of 5 cents.

9 Q Yes.

10 A And there's no heterogeneity.

11 Q Correct, all buyers and all sellers are
12 the same in this hypothetical.

13 A At least on this dimension, the
14 willingness to pay and willingness to accept, all
15 buyers are identical and all sellers are
16 identical. Is that what I understand you --

17 Q Yes, it sounds like you're with me so
18 far.

19 A Okay.

20 Q Now let's further assume that there are
21 differences in the bargaining power of the buyers
22 and sellers such that the negotiated rates we
23 would see range anywhere from 7 and a half cents
24 on the low end to as high as 12 and a half cents
25 on the high end.

1 A Correct.

2 Q All within the range of willingness to
3 pay and or willingness to accept.

4 A So I'm going to recapitulate this just
5 so that I can follow your hypothetical. So we
6 have these identical buyers at 15 cents willing to
7 pay, identical sellers at 5 cents willing to pay.
8 But when they negotiate with one another, there is
9 heterogeneity of bargaining power --

10 Q Exactly.

11 A -- so they split the pie at different
12 points. And some contracts end up as low as 7 and
13 a half, is that what you said?

14 Q That's correct.

15 A And as high as?

16 Q 12 and a half.

17 A 12 and a half.

18 And do you have a particular
19 distribution in mind on that --

20 Q For purposes of the hypothetical, I
21 don't think it makes any difference.

22 A Okay.

23 Q If it does, I'm sure you'll let me know.

24 A I suspect I will.

25 Q Just to be clear, in this hypothetical,

1 these are the rates that we see in the absence of
2 a statutory license.

3 A I think I follow you, yes.

4 Q Good.

5 Now, let's impose a statutory license of
6 14 cents.

7 A I follow you, yes.

8 Q With me so far.

9 So according to your model, every single
10 one of the negotiated transactions that would have
11 been entered into in the absence of that statutory
12 rate of between 7 and a half cents on the low end
13 and 12 and a half cents on the high end will all
14 now all be pulled up to that 14-cent statutory
15 rate, correct?

16 A Well, two things will happen. One is
17 that they will be pulled up to -- it's 14 cents
18 that you posited?

19 Q 14 cents.

20 A -- that the buyer's willingness to pay
21 exceeds 14 cents and, therefore, it becomes common
22 knowledge that the buyer would be willing to buy
23 at 14 cents. The seller would know this and would
24 say, well, look, I can -- any of those sellers
25 between 7 and a half cents and 12 and a half cents

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1 would say I can get a better deal by just not
2 bargaining. So, A, you're correct that those
3 deals would get pulled up to 14 cents, but, B,
4 they would also no longer be consensual deals.

5 Q So the answer to my question was, yes,
6 they would all get pulled up to 14 cents, correct?

7 A That is a roundabout way of saying yes.

8 Q Thank you.

9 So I take it, then, that you would agree
10 that whether and the extent to which a statutory
11 license either pulls up or pulls down negotiated
12 rates to the statutory level in your model is
13 dependent on the level at which that statutory
14 rate is set, correct?

15 A I, unfortunately, would not agree, and
16 that's why I asked you the question of negotiated
17 rates. So you've just given me an example in
18 which there were a bevy of negotiated rates. They
19 all disappeared and turned into non-negotiated
20 rates. So I think the answer --

21 Q Let me ask my question again because I
22 don't think you've answered it. I'll try it
23 again.

24 A I think I answered the question that you
25 asked.

1 Q Let me try again, see if we still have
2 some misunderstanding.

3 So you would agree that whether and the
4 extent to which the statutory license either pulls
5 up or pulls down otherwise negotiated deals to the
6 statutory level is dependent on the level at which
7 that statutory rate is set?

8 A Okay, so you have now dropped the word
9 "negotiated" out of the question, I think, so,
10 yes, in this particular example, it's an example
11 where the rates that emerge are all non-negotiated
12 and they would be pulled up from negotiated rates
13 to non-negotiated rates. This is, essentially, I
14 think when Mr. Blavin was taking me through my
15 direct, there's a crowding down and a crowding up,
16 and you've given me a hypothetical in which no
17 one's above the statutory rate.

18 Q Right, there's just a crowding up, if
19 you will, rather than crowding down in this
20 hypothetical.

21 A Right, and if you've located this
22 hypothetical by assuming the perfect knowledge and
23 no heterogeneity and valuation of buyers.

24 Q So let's leave my hypothetical and turn
25 back to the model.

1 CHIEF JUDGE BARNETT: Before we leave
2 there, so you have negotiated deals, and the
3 seller's willingness to accept is at 5, they
4 negotiated at no less than 7 and a half. Why
5 would they not jump at a 14-cent rate?

6 THE WITNESS: Well, the sellers in this
7 instance are going to jump at a 14-cent rate. The
8 strategic issue is this. It's the buyer's option
9 whether to pay that 14-cent rate or negotiate. So
10 the seller initially is thinking, wow, I would
11 love to get a 14-cent rate, but it's not up to me.
12 The buyer's got to opt into this 14-cent rate.
13 And one of the phenomenon in the structural model,
14 Mr. Ebin has given an example where there's
15 essentially no buyer or seller heterogeneity, in
16 which the seller might think, okay, I can get this
17 9-cent price, but I know that I'm bargaining
18 against the buyer, who is going to be willing to
19 pay the statutory rate. So maybe I'll just refuse
20 to bargain and let this deal go off at a
21 non-negotiated price.

22 That's essentially the dynamic that I
23 worked through with Mr. Blavin this morning as
24 well as another example, I think, of what Mr. Ebin
25 is asking me now.

1 CHIEF JUDGE BARNETT: Okay, thanks.

2 THE WITNESS: Sure.

3 BY MR. EBIN:

4 Q In the answer you just gave, you seem to
5 be suggesting that it's entirely up to the buyer
6 as to whether the deal would be struck -- whether
7 there would be a negotiation or whether we'll just
8 end up at the statutory rate. In fact, it's the
9 case, is it not, that the seller can simply say,
10 I'm not going to talk to you, I'm just going to --
11 if you're going to use my stuff, it's going to be
12 at the statutory rate, correct?

13 A That's possible, yes.

14 Q So now leaving the hypothetical, unless
15 Your Honors have any more questions.

16 Now, according to your model, whenever
17 there's a deal that is actually entered into
18 between a statutory webcaster and a record label
19 in the shadow of the statutory license, that exact
20 same transaction would take place in the absence
21 of the statutory license, correct?

22 A So I think -- I'm going to try to
23 respond to your question by --

24 Q Please.

25 A So if there were a deal that is still a

1 negotiated deal --

2 Q Negotiated deal.

3 A -- that takes place in the shadow of the
4 statutory license, then that deal would be a deal
5 that you might still see if those same pair was
6 plucked out under a non- -- in a world without the
7 statutory license.

8 Q So for that transaction, according to
9 your model, the statutory rate has no impact on
10 the negotiated deal, correct?

11 A It has -- it ends up being above the
12 maximum willingness to pay of the buyer. So
13 similar -- think about a world -- one way to think
14 about this, Mr. Ebin, is suppose the statutory
15 rate --

16 Q I'm sorry, Professor Talley, this is a
17 yes or no question.

18 A Now I can't remember what --

19 Q For that transaction, according to your
20 model, the statutory rate has no impact on the
21 negotiated deal, correct?

22 A If it's above the highest conceivable
23 valuation number, it would not have, right.

24 Q So applying your model, then, to the
25 Pandora-Merlin deal, your model, therefore, would

1 imply that Pandora and Merlin would have reached
2 exactly the same deal terms in the absence of the
3 statutory license as they did in its presence,
4 correct?

5 A It's possible. I know Pandora has put
6 forward the view that this is a -- that the deal
7 terms here are less than the pureplay rate. One
8 other possibility, since there are other
9 accoutrements of the Pandora-Merlin deal, is that
10 it's functionally the equivalent of the per-play
11 rate, but, you know, due to other aspects of the
12 pricing behavior, the per-play part got washed
13 down while other parts, like guarantees and
14 steering, ended up making up the difference.

15 So it's possible that the Merlin deal is
16 right -- is functionally right at the pureplay
17 rate, but it is also possible that it is one of
18 these that's below.

19 Q Whether or not the Merlin deal is
20 functionally, as you put it, at the per-play rate,
21 that's not something you investigated or discussed
22 in your written rebuttal testimony, it is?

23 A It could go either way.

24 Q You did no quantification of that, did
25 you?

1 A I did not.

2 Q One last topic. At the time of your
3 deposition, it was your view that record labels
4 would likely want to license their works to
5 Pandora because, with its large listener base,
6 Pandora can help that label reach lots of
7 different potential listeners, correct?

8 A I assume you're reading something from a
9 transcript, so I will --

10 Q Does that sound right to you?

11 A It might, yes. I possibly said that,
12 yes.

13 Q We can take a look if you like.

14 A I'll accept your stipulation.

15 Q It was also your view at the time of
16 your deposition that this enhanced exposure
17 provided by Pandora and other noninteractive
18 webcasters will likely lead to increased sales of
19 downloads and CDs, correct?

20 A It could, yes.

21 MR. EBIN: Thank you. No further
22 questions.

23 MR. JOSEPH: No questions, Your Honor.

24 MR. MILLER: No questions, Your Honor.

25 MR. TOOF: No questions, Your Honor.

1 MR. BLAVIN: Brief redirect, Your Honor.

2 CHIEF JUDGE BARNETT: Yes.

3 REDIRECT EXAMINATION BY COUNSEL FOR SOUNDEXCHANGE

4 BY MR. BLAVIN:

5 Q Professor Talley, if we can turn back to
6 your deposition transcript, page 161 -- 160,
7 line 24, through 161, line 14, you said that you
8 were just going to -- when you were having the
9 back-and-forth with Mr. Ebin, you noted that you
10 had further context to provide with respect to
11 that answer. Would you mind providing that?

12 A So you're -- excuse me, what pages
13 again?

14 Q Sorry, page 160.

15 A Oh, yes.

16 Q I believe the question was -- begins at
17 line 24.

18 A Yes. Right. Oh, yes, yes. Thanks.

19 So here's the deal. So I believe
20 Mr. Ebin had asked whether the terms of contracts
21 reached by parties would have any effect on other
22 contracts reached by parties. And what I was
23 going to add, but didn't have the opportunity to,
24 is that one way that this model can be viewed,
25 these parties are essentially -- they're

1 negotiating one on one, but they may have an
2 understanding or a conjecture, an equilibrium
3 conjecture about the contracts that are being
4 entered into economy-wide. That conjecture would,
5 in fact, have an effect on their willingness to
6 pay or willingness to accept.

7 So the nature of contractual
8 attractiveness certainly could affect the contract
9 status that these parties work out simply because
10 it gets baked into their willingness to pay more
11 than is acceptable.

12 Q Thank you for that.

13 Now, with respect to the model that we
14 went over before, in which there was a range of
15 rates and then the imposition of the statutory
16 rate, now, for that initial range of rates, were
17 those rates negotiated in the backdrop of an
18 existing statutory rate when they were charted
19 through your simulations?

20 A No.

21 Q And the Pandora-Merlin agreement, to
22 your understanding, was negotiated in the backdrop
23 of the statutory and pureplay rates; is that
24 correct?

25 A My understanding is that the Pandora and

1 Merlin deal was, in fact, negotiated in the
2 backdrop of the pureplay rates.

3 MR. BLAVIN: Thank you. No further
4 questions.

5 MR. EBIN: Nothing further.

6 CHIEF JUDGE BARNETT: Thank you,
7 Dr. Talley.

8 Any other questions from the judges?

9 Thank you, Dr. Talley.

10 THE WITNESS: Thank you.

11 (Witness excused.)

12 CHIEF JUDGE BARNETT: Mr. Pomerantz, I
13 think, were those two witnesses taken out of
14 order, then?

15 MR. POMERANTZ: Correct. Now we're
16 going to go back and have three of theirs, I
17 think. Then that's, for now, the end of their
18 case.

19 MR. RICH: Your Honor, our next witness
20 will be, for Pandora, Simon Fleming-Wood, and
21 Mr. Larson will be conducting the examination.

22 CHIEF JUDGE BARNETT: Thank you.

23 - - -

24 SIMON FLEMING-WOOD,
25 having been duly sworn, testified as follows:

1 MR. LARSON: May I proceed?

2 CHIEF JUDGE BARNETT: You may.

3 DIRECT EXAMINATION BY COUNSEL FOR PANDORA

4 BY MR. LARSON:

5 Q Could you state your full name for the
6 record, please.

7 A My name is Simon Fleming-Wood.

8 Q Could you spell the last name for us,
9 please.

10 A F-L-E-M-I-N-G hyphen W-O-O-D.

11 Q Thank you.

12 Mr. Fleming-Wood, could you please
13 briefly describe your background, educational and
14 work background prior to joining Pandora.

15 A Certainly. I graduated from Stanford
16 University in 1991 with a bachelor's in political
17 science. Since then, I've held a series of
18 ever-more-senior marketing roles. Before Pandora,
19 I was the vice president of marketing of a company
20 called Pure Digital Technologies, which made the
21 Flip Video Camera, which was sold to Cisco. I
22 spent about two years at Cisco running marketing
23 for their consumer group.

24 Q When did you join Pandora?

25 A In October of 2011.

1 Q What is your job title at Pandora?

2 A Chief marketing officer.

3 Q That's the position you've had since
4 you --

5 A My feet don't touch the ground. Someone
6 was taller than me, apparently.

7 Q So you've been the chief marketing
8 officer since you joined in 2011?

9 A Yes.

10 Q What are your job responsibilities as
11 Pandora's chief marketing officer?

12 A I run multiple teams at Pandora. I have
13 responsibility for brand and analytic marketing.
14 I have responsibility for business development as
15 well as the communications in the PR function, as
16 well as the Pandora One subscription business.

17 Q Does your job involve analyses of other
18 music services that operate in the market along
19 with Pandora?

20 A It does.

21 Q What sort of analyses of other market
22 participants does your team conduct?

23 A We take it upon ourselves to understand
24 the landscape of music services available to
25 consumers. We feel like we're in a very, sort of,

1 loud space. There's always a lot of news.
2 Pandora is often mentioned in stories about other
3 services. So we feel like it's incumbent upon us
4 to understand the perceptions about these services
5 in the marketplace.

6 Q Now, your testimony in paragraph 3
7 describes marketing analytics as part -- as
8 falling under your purview. Could you just
9 explain what that means with respect to your
10 competition.

11 A Yes. So we understand -- we seek to
12 understand the users of the other music services
13 in the landscape. We seek to understand how many
14 users they have, what their performance is in the
15 app stores, so that we can keep track of how
16 they're doing.

17 Q Is some of that work in the nature of
18 surveys and quantitative research and that sort of
19 thing?

20 A Yes, qualitative and quantitative
21 research.

22 Q Did you prepare written direct testimony
23 in connection with this proceeding?

24 A I did.

25 Q So there's a binder in front of you. If

1 you could take a look at what's been marked as the
2 tab Pan Ex 5002. Do you see that?

3 A I do.

4 Q Do you recognize that as your written
5 direct testimony in this case?

6 A Yes.

7 Q Your signature is on the last page of
8 this document?

9 A Yes.

10 MR. LARSON: Your Honor, I would offer
11 Pandora 5002 into evidence.

12 MR. KLAUS: No objection.

13 CHIEF JUDGE BARNETT: 5002 is admitted.

14 (Pandora Exhibit 5002 was admitted into
15 evidence.)

16 BY MR. LARSON:

17 Q Then I would also move -- if you could
18 look at tab 5003, 4, and 6. Actually, I'll note
19 that 3 and 6 are videos that are on a disc that's
20 tucked inside the first inside sleeve. Are
21 Exhibits 5003, 5004, and 5006 -- were those
22 appended exhibits to your written testimony?

23 A Yes, they were.

24 MR. LARSON: I would offer those three
25 exhibits into evidence.

1 MR. KLAUS: No objection on 5003 and
2 5006, Your Honor. 5004 is a portion of a document
3 where there is an exhibit number for the full
4 document. We would object on completeness grounds
5 and ask that the entirety of the exhibit be -- the
6 entirety of the document be admitted.

7 MR. LARSON: That's acceptable to
8 Pandora.

9 CHIEF JUDGE BARNETT: Can we
10 cross-reference what the original exhibit number
11 was?

12 MR. KLAUS: Yes, the original exhibit
13 number that --

14 CHIEF JUDGE BARNETT: Or the other.

15 MR. KLAUS: The other -- the other that
16 corresponds to 5004 is SoundExchange Exhibit 1679.

17 CHIEF JUDGE BARNETT: And that has been
18 admitted?

19 MR. KLAUS: It has not been admitted.
20 We were going to seek to admit it, but if
21 Mr. Larson is happy to do so, then I think we can
22 have agreement on that.

23 MR. LARSON: Yes.

24 CHIEF JUDGE BARNETT: Thank you.
25 Exhibit 1679 is admitted.

1 (SoundExchange Exhibit 1679 was
2 admitted into evidence.)

3 CHIEF JUDGE BARNETT: And for purposes
4 of referring to the document during the
5 examination of Mr. Fleming-Wood, Mr. Klaus,
6 there's no objection to us looking at these few
7 pages?

8 MR. KLAUS: No.

9 CHIEF JUDGE BARNETT: You're welcome to
10 use the entire document for cross-examination.

11 MR. KLAUS: Sure.

12 BY MR. LARSON:

13 Q So Mr. Fleming-Wood, let's turn to the
14 first substantive topic in your testimony, which
15 is identified as the Pandora listening experience.

16 CHIEF JUDGE BARNETT: Before that, let
17 me make sure that 5003 and 5006 are admitted and
18 5004 is admitted in the body of 1679.

19 (Pandora Exhibits 5003, 5004, and 5006
20 were admitted into evidence.)

21 BY MR. LARSON:

22 Q So is Exhibit 5003, Mr. Fleming-Wood, a
23 video showing the basic Pandora functionality?

24 A Yes, it is.

25 Q Although we are four and a half weeks

1 into our trial here, I think we'll spend a few
2 minutes taking a look at that video now, if we
3 could.

4 (Video played as follows:)

5 "How to listen to Pandora. Pandora
6 Internet Radio can be accessed from all kinds of
7 personal computers, mobile phones and tablets, and
8 even through one's car."

9 "Pandora, please say a command."

10 "Play station Michael Zapruder Radio."

11 "Tuning to station Michael Zapruder
12 Radio."

13 (Music playing.)

14 "Simple tasks, all voice-activated."

15 "Listeners can listen to Pandora on
16 their computers by simply opening an Internet
17 browser and typing www.Pandora.com. Those wishing
18 to listen to Pandora on their mobile phone can
19 download and install the app free from the iTunes
20 Store or the Android marketplace. Each first-time
21 user is prompted to create a Pandora account by
22 providing their e-mail, birth year, ZIP Code,
23 gender, and creating a personal password.

24 "Listeners are then prompted to seed a
25 station by typing the name of an artist, song, or

1 musical genre they wish to hear. When ready,
2 Pandora's propriety music recommendation engine,
3 the Music Genome Project, will automatically begin
4 streaming a personalized radio station consisting
5 of songs with relevant musical similarities to the
6 seed.

7 "Listeners can click buttons
8 representing a thumbs up or a thumbs down to
9 signify whether they like or dislike each song
10 chosen for them, and their Pandora station will
11 learn and factor these ratings when making future
12 song selections. Listeners do not have to thumbs
13 up or thumbs down songs. Pandora's Music Genome
14 Project will continue to stream musically related
15 songs without any input from the listener.

16 "When available, Pandora displays
17 biographical information about a performer as well
18 as a list of similar artists that listeners may
19 enjoy and the song's lyrics. Banner advertising
20 is displayed and audio advertising is interspersed
21 between songs within the music stream. Because
22 Pandora's musicologists review songs that go into
23 the Music Genome, Pandora is able to use
24 musicological similarities to play new music or
25 songs by lesser known artists that listeners are

1 likely to enjoy.

2 "Take, for example, the little-known
3 band Orion the Hunter, which featured musicians
4 formerly associated with the very popular band
5 Boston and shared musical similarities with
6 another successful band, Journey, especially the
7 high-flying vocals of Orion the Hunter singer Fran
8 Cosmo" --

9 (Music playing.)

10 -- "and Journey singer Steve Perry."

11 (Music playing.)

12 "Thanks to the Music Genome Project's
13 ability to identify these similarities, thousands
14 of Pandora listeners, who may have never heard of
15 Orion the Hunter, have been organically introduced
16 to songs from Orion the Hunter that they may
17 enjoy.

18 "In addition to giving songs a thumbs up
19 or down, listeners can personalize their existing
20 stations by clicking the Add Variety button and
21 then typing the names of other artists or songs
22 they like.

23 "Because music is often a shared
24 experience, Pandora listeners can share their
25 stations with others. For example, listeners can

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1 click the Options button and make their stations
2 visible to other listeners, find other listeners
3 who like the same music, or associate their
4 Pandora account with their Facebook account and
5 share things such as what station they are
6 listening to or what song they thumbed up.

7 "Listeners may also pause songs they're
8 listening to and skip ahead to the next song but
9 may not skip more than six songs per station per
10 hour or 12 songs in a 24-hour period.

11 "Listeners may also click on the New
12 Station button to create additional personalized
13 radio stations based on other songs, artists, or
14 musical genres. With these simple tools,
15 consumers can put Pandora's Music Genome Project
16 to work for them and create personalized radio
17 stations."

18 (End of playing of video.)

19 BY MR. LARSON:

20 Q So Mr. Fleming-Wood, is the video we
21 just watched consistent with your understanding of
22 how Pandora works?

23 A It is, with one exception.

24 Q And what was the exception?

25 A That the daily skip limit is 24 and not

1 12.

2 Q Thank you.

3 Can the Pandora user pick the song he or
4 she will hear on Pandora?

5 A No.

6 Q Does the Pandora user know what song is
7 going to play next?

8 A No, not until it starts.

9 Q So once a station is seeded and playing,
10 how are subsequent songs, at a basic level, chosen
11 by Pandora?

12 A So, as the video portrayed, the Music
13 Genome Project is our, sort of, underlying
14 technology for recommending songs.

15 Q Again, we've heard a good bit about the
16 Genome Project during the course of the trial, but
17 could you give us a couple sentences explaining
18 what that is, on a basic level.

19 A Sure.

20 So the Music Genome Project is this
21 labor of love that started actually six years
22 before Pandora ever launched of collecting, sort
23 of, musical DNA level millions of -- well, at the
24 time, thousands of songs, now over a million
25 songs, and dissecting it into as many of 450

1 different attributes.

2 So in the case of the vocal performance,
3 there are as many as 20 different attributes
4 describing that vocal performance. It's done by
5 professional musicologists and musicians who are
6 all highly trained and expert. So that database
7 then becomes the sort of backbone for making -- I
8 think of it almost like a constellation of endless
9 stars, but in this case it's songs and musical
10 attributes, for making connections in a
11 multidimensional universe between songs.

12 Q Your testimony at paragraph 17 also
13 mentions playlist algorithms that Pandora uses
14 along with the Genome Project. Could you just
15 explain what you mean by that, those playlist
16 algorithms.

17 A So in addition to that, sort of,
18 foundation of musicological DNA-level data on
19 songs, Pandora has built over the years dozens of
20 algorithms using both that data as well as thumb
21 data and other feedback from listeners to
22 determine the best song to play for any individual
23 listener on any individual station. At any given
24 moment on Pandora, there are as many as 50
25 different algorithms running, so essentially

1 competing to choose the next song that plays for
2 Pandora.

3 And so the personalization itself is
4 actually under the hood personalized because the
5 winning algorithms for me might be different than
6 the winning algorithms for you. In fact, they
7 might be different on different stations. So the
8 personalization of Pandora is sort of the
9 multilayered, but, essentially, those 50
10 algorithms are all nominating the next song to
11 play for that listener based on multiple
12 approaches.

13 Q So does that mean that the algorithms
14 identify a single song that should be played next
15 or a group of possible songs to play next?

16 A So each of the algorithms is nominating
17 its own song, right? And then a master algorithm
18 sort of sits on top of it and chooses who gets to
19 win, but that's the general framework.

20 Q The video showed thumbs up and thumbs
21 down. What ways, other than thumbing up and
22 thumbing down, can a user influence what songs
23 they hear on Pandora?

24 A Really only by skipping, but thumbs up
25 and thumbs down are the major ways that Pandora

1 collects feedback.

2 Q Does a Pandora user have to use the
3 thumbs?

4 A No, they don't.

5 Q Do you have data on to the extent to
6 which they do or don't?

7 A Yes. Just over 50 percent of Pandora
8 monthly users would thumb. So almost 50 percent
9 would not.

10 Q Do Pandora users have the ability to
11 rewind or fast-forward or replay songs?

12 A No.

13 Q More generally, how does the Pandora
14 listening experience compare to what a user
15 experiences with an on-demand service like Spotify
16 or Rhapsody?

17 A Sure. Well, Pandora is a radio
18 experience.

19 CHIEF JUDGE BARNETT: Would you pull the
20 mic just a little closer.

21 THE WITNESS: Yes. I'm sorry.

22 CHIEF JUDGE BARNETT: Thank you.

23 A So Pandora is a radio experience where
24 the user doesn't know what song is going to play
25 for them next. It's programmed by the service.

1 They have no control over what plays next, and
2 they don't know it until it begins playing for
3 them.

4 On-demand services, by their nature, are
5 controlled by the user. The user can select
6 either the playlist, they can build the playlist,
7 they can choose the exact song in most cases. And
8 that's something that somebody goes into with the
9 intention of wanting to hear something very
10 specific. Pandora is something that we refer to
11 as lean-back listening, where people go in wanting
12 a radio-like experience where they want music
13 played for them.

14 Q Have you seen the rebuttal testimony of
15 Mr. Kooker from Sony?

16 A I have.

17 Q You understand that he claims that
18 Pandora stations seeded with a particular artist
19 always play that artist first?

20 A I have seen that.

21 Q What's your reaction to Mr. Kooker's
22 testimony on that point?

23 A I don't think it's overly valid. It's
24 very simplistic, and we could have told him, could
25 have saved him some time, I think, by explaining

1 that any new listener on Pandora starting a new
2 station, the way that the video even showed it, is
3 that the first time you play an artist in a new
4 station, it will play a song that represents
5 musicologically the work from that artist and from
6 then it will build the playlist. That's just the
7 way that service is built.

8 Q You mentioned the first time. Does that
9 experience change when users return to a station
10 that they've previously seeded or created?

11 A Yes, it can. It can. So I often, on my
12 stations, don't hear -- in fact, I would say
13 probably the majority of time do not hear, because
14 I'm a longtime Pandora listener, the artist on the
15 station, unless I haven't listened to it for a
16 long time, then Pandora will try and play that
17 seed artist, but if it's a station that you
18 listened to yesterday, Pandora is unlikely to play
19 that artist first.

20 Q When Pandora users seed an artist
21 station, do they know what songs it will play?

22 A No.

23 Q Are there limits on how many times the
24 selected artist can play?

25 A Yes. So we adhere to the performance

1 complement for sound recordings, and that's for
2 songs by a seed artist over a period of three
3 hours.

4 Q Has the Pandora interface changed in any
5 material way since the product was launched in
6 2005?

7 A No, the major sort of thrust of Pandora,
8 the engineering and product team, since the
9 product launch, was expanding it to other
10 platforms. So whereas it started on the desktop,
11 it is today on over 1,000 consumer electronic
12 devices. It's on every significant mobile
13 smartphone platform. And, obviously, it's in a
14 lot of cars as well, over 160 cars.

15 Q But has the -- recognizing, I think you
16 described that in your testimony, that it's
17 available in new places, has the basic
18 functionality of the service changed as it's
19 expanded to those new locations?

20 A No. We've added some ancillary things
21 like bios and, in some cases, lyrics. But, no,
22 the major functionality of Pandora has not changed
23 dramatically at all.

24 Q Let's shift gears slightly and talk
25 about the competitive landscape in which you

1 operate.

2 Who does Pandora view as its chief
3 competition for listeners?

4 A Given that we're a radio service, we
5 believe we compete most directly with FM radio,
6 which is where the bulk of music listening occurs.

7 Q Why do you say that, why broadcast
8 radio?

9 A Well, we see this as lean-back style of
10 radio listening, which represents about 80 percent
11 of all music consumption in the U.S. today, and
12 compare that with what we refer to as lean-in
13 listening, which, when a user approaches their
14 music experience knowing what they want to hear,
15 in the old days, that was your record collection,
16 it was your cassettes. That's obviously changing
17 before our very eyes. But the notion that users
18 have a distinct use case in mind when they go to
19 listen to music is such that we believe we very
20 firmly compete against other radio-like services.
21 And it so happens that that is the bulk of music
22 listening, is the majority of about 80 percent of
23 listening.

24 Q Does Pandora's expansion into cars
25 impact that view?

1 A Well, FM radio today is still, by far,
2 the largest source of music listening in the
3 country, and roughly half of that listening takes
4 place in automobiles. So Pandora's now seven-year
5 march to be available in cars is completely
6 designed to compete for those listener hours
7 because it's such an important part of our growth
8 strategy, frankly.

9 Q Is the expansion into the auto a company
10 priority for Pandora?

11 A It's been a company priority for almost
12 a decade.

13 Q Do you consider on-demand services to be
14 competitors with Pandora?

15 A From a primary competition for listener
16 hours and advertising dollars, no.

17 Q Why not?

18 A Like I was explaining, we see a market
19 that has, sort of, two distinct use cases for
20 people when they want to listen to music. One is
21 a lean-back radio experience where they want music
22 to be played at them, and another is a
23 lean-forward I know what I want to listen to and I
24 want to choose it and control that. Pandora
25 competes in the former bucket. We actually see

1 the second bucket as highly complementary to
2 Pandora, and we're aware of many, many users who
3 use both services on a daily basis.

4 Q Can you say a bit more about what you
5 mean when you identified Pandora and on-demand
6 services as being complements.

7 A Yes, I think there's a -- you know, if
8 you were to segment the population, there are a
9 lot of people who listen just to radio-style kinds
10 of things. But there are a lot of people who
11 listen to radio and want to control their
12 music-listening experience at some point. There
13 are also some that always want to control their
14 listening experience.

15 So the group that wants both of those
16 things looks for services that can satisfy both of
17 those needs. So we look at dual usage of
18 platforms or services like Pandora and services
19 like Spotify, and we see a high correlation.

20 Q What information, if any, do you have to
21 support the view that you just described that
22 on-demand services and Pandora complements?

23 A Well, I think the first would be
24 research studies, quantitative research studies
25 that we do that show the overlap of our listeners

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1 with on-demand listeners. That would be one. I
2 think also the very fact that Pandora and Spotify
3 have managed to grow side-by-side over the last
4 few years and each grow significantly is also
5 evidence that they're not competing directly with
6 one another. There's room for both services.

7 JUDGE STRICKLER: Excuse me. I have a
8 question for you. Good afternoon.

9 THE WITNESS: Hi.

10 JUDGE STRICKLER: To the extent that the
11 interactive services are now developing things
12 that are more noninteractive in nature, even
13 though they may not be DMCA compliant, does that
14 now put you more in competition with those
15 services because they could be sort of, if you
16 will, one-stop shopping? You could have your
17 lean-forward and lean-back within one service,
18 whereas, in the absence of that, you would need to
19 have the complement as you describe them, Pandora,
20 say, and Spotify?

21 THE WITNESS: In my opinion, no. I
22 think that the initial intent about what someone
23 is looking for in their music-listening experience
24 at that moment determines whether they go to
25 YouTube or Spotify or Pandora.

1 And on top of that, I would point out
2 that the kinds of features that you're mentioning
3 come with a whole set of controls. For example,
4 the playlists that we're talking about, the user
5 has the ability to create those playlists, much
6 like they did with their iTunes library of songs
7 they owned.

8 So they are in control of that
9 experience one way or another, and they obviously
10 know what song is going to play. They know the
11 list of songs that are going to play in most cases
12 because one's listening is still on either the
13 tablet or the desktop. They actually can control
14 it in a completely on-demand fashion, still, in
15 terms of skipping, rewinding features that Pandora
16 doesn't have. So I think I would point out that
17 the control that that allows a user, it
18 capitalizes on a different mind-set.

19 JUDGE STRICKLER: Do any of the
20 interactive services have a radio function whereby
21 the music is played for them, played for listeners
22 at random?

23 THE WITNESS: Yes, I think most of them
24 have a, what they would call the radio function.
25 I don't think it's the primary thrust of any of

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1 them, and I don't think it's a significant size,
2 you know, significant amount of listening on any
3 of the services.

4 JUDGE STRICKLER: But if I was someone
5 who wanted to be in that group that you described,
6 sometimes I want to control the music I hear,
7 sometimes I want to lean back and have music
8 played that I might like, there are services that
9 combine both of those function in one.

10 THE WITNESS: There have been those
11 services ever since Pandora existed and the fact
12 of the matter is that nobody has ever used those
13 services that way.

14 JUDGE STRICKLER: Thank you.

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1 BY MR. LARSON:

2 Q That actually leads, I think, to our
3 next and last piece of testimony. Did you prepare
4 a written rebuttal testimony in this proceeding?

5 A I did.

6 Q I've placed before you what's identified
7 as Pandora Exhibit 5364. Do you recognize that as
8 your written rebuttal testimony in this
9 proceeding?

10 A Yes, I do.

11 Q Is that proceeding generally just to
12 summarize some description that you did of various
13 radio-like offerings or allegedly radio-like
14 offerings of certain interactive services?

15 A It is, yes.

16 MR. LARSON: We would offer Exhibit 5364
17 into evidence.

18 MR. KLAUS: No objection.

19 CHIEF JUDGE BARNETT: 5364 is admitted.

20 (Pandora Exhibit 5364 was admitted into
21 evidence.)

22 BY MR. LARSON:

23 Q Mr. Fleming-Wood, is there anything in
24 addition to what's in the written testimony that
25 you want to add at this point about those

1 services?

2 A I think only -- I mean, it was to the
3 question the judge just asked me about services
4 that are positioning themselves a little more as
5 lean-back features but that still give the user a
6 significant amount of control that, in my
7 estimation, would be attractive to a different
8 type of listener than would like Pandora.

9 MR. LARSON: Thank you. I have no more
10 questions.

11 CHIEF JUDGE BARNETT: Thank you,
12 Mr. Larson.

13 Mr. Klaus, you're doing the honors?

14 MR. KLAUS: I am, Your Honor. I
15 apologize while I get set up here.

16 CROSS-EXAMINATION BY COUNSEL FOR SOUNDEXCHANGE
17 BY MR. KLAUS:

18 Q Mr. Fleming-Wood, good afternoon.

19 A Good afternoon.

20 Q My name is Kelly Klaus. I represent
21 SoundExchange. It's nice to meet you. We have
22 not met before, obviously.

23 A Nice to meet you.

24 Q Just to follow up on the questions about
25 radio, so your comments about the level of control

1 got me to open my Spotify Radio, for example. And
2 you're familiar with Spotify's radio product,
3 right?

4 A Generally, yes.

5 Q And I just happened to pick The Rolling
6 Stones, your radio station, the whole thing got me
7 nostalgic for them. And I notice it brought up --
8 the first song was "Can't You Hear Me Knocking"
9 from "Sticky Fingers." It's gone because I
10 fast-forwarded through it, but I can't get back to
11 that, can I, on the Spotify Radio?

12 MR. LARSON: Objection. Lack of
13 foundation.

14 CHIEF JUDGE BARNETT: Overruled. You
15 can answer if you know.

16 A Yes, I don't know the answer to that
17 specifically. I would not be surprised if you
18 couldn't. It's within their radio product
19 specifically.

20 Q And I can flip up, and I can see, boy,
21 everybody knows that, that's "Born in the US" --
22 that's the album "Born in the USA" by The Boss,
23 right?

24 JUDGE STRICKLER: It looks like your
25 finger.

1 MR. KLAUS: Well, here, be careful
2 because it will go away.

3 BY MR. KLAUS:

4 Q You're from New Jersey. You should know
5 that's Bruce Springsteen that's going to come on
6 next. You don't know what song it's going to be,
7 do you?

8 MR. LARSON: Same objection.

9 A I don't know. I haven't used that
10 product enough that it's fresh in my memory.

11 Q And there's not -- on the radio
12 function -- again, this is the radio and I could
13 have picked a whole bunch of other artists, but
14 this is based on The Rolling Stones. There's not
15 a playlist here, is there?

16 A No, I'm surprised you could even see the
17 album that's next, actually.

18 Q I can see the album, but I can't see the
19 song, right?

20 A That's what you're telling me. I don't
21 know that.

22 Q You have no reason to doubt that you
23 can't see what the song is?

24 A I don't, no.

25 Q And you also say in your written direct

1 testimony, you make the comment that, in
2 paragraph 9, that Pandora -- you say, "Pandora
3 features a unique feedback system whereby
4 listeners can further indicate their music
5 preferences by pressing the thumbs up or thumbs
6 down icon while a song is playing."

7 Do you recall that testimony in
8 paragraph 9 of your written direct testimony?

9 A I see it, yes.

10 Q That's actually not unique to Pandora,
11 is it, the thumbs up, the thumbs down?

12 A Well, the thumbs themselves are not
13 unique, but what happens with the thumbs is
14 certainly very unique.

15 Q And as we can see here -- I can bring it
16 over to you, but Spotify has got thumbs on its
17 radio service, right?

18 A It appears to.

19 Q IHeartRadio, they've got thumbs on their
20 service, right?

21 A Correct.

22 Q Just in terms of the features and things
23 that your competitors offer to their consumers,
24 the services they offer, the features, that's
25 something that you track through your department,

1 right?

2 A Yes.

3 Q And we would find that, for example --
4 in the big binder, if you could turn to tab 18.

5 CHIEF JUDGE BARNETT: This is a
6 restricted document, Mr. Klaus?

7 MR. KLAUS: It's a restricted document,
8 but I'm not going to go into the details of it.

9 CHIEF JUDGE BARNETT: Thank you.

10 BY MR. KLAUS:

11 Q So Mr. Fleming-Wood, tab 18, this is an
12 example -- this is SoundExchange Exhibit 2244 --
13 of one of your Competitive Intelligence Reports,
14 right?

15 A I would point out this was not created
16 by my team. It was created by our product team.

17 Q But it's something that your team is
18 responsible for circulating to the executive
19 staff, right?

20 A Not this particular report, no.

21 Q Is it a document that you have received
22 in the course of your work as a member of the
23 executive staff?

24 A Yes.

25 MR. KLAUS: We move to admit

1 Exhibit 2244, Your Honor.

2 MR. LARSON: No objection. I think it
3 may have been entered already.

4 CHIEF JUDGE BARNETT: It looks familiar
5 to me.

6 MR. KLAUS: This is a different one.
7 This is April of 2014.

8 MR. LARSON: Then I object to lack of
9 foundation. He said only that he received it.

10 CHIEF JUDGE BARNETT: I didn't hear what
11 you said, Mr. Larson.

12 MR. LARSON: I objected to the lack of
13 foundation. He indicated that it was something
14 that he received but not that his team created.

15 CHIEF JUDGE BARNETT: Overruled.

16 2014 is admitted -- excuse me, 2244 is
17 admitted.

18 (SoundExchange Exhibit 2244 was
19 admitted into evidence.)

20 BY MR. KLAUS:

21 Q If you could just flip ahead a couple of
22 tabs in the binder.

23 JUDGE FEDER: Excuse me one moment. I
24 just noticed that on the live stream here it's
25 coming up as 2224. It is, in fact, 2244, for the

1 record.

2 MR. KLAUS: Thank you, Your Honor.

3 BY MR. KLAUS:

4 Q Mr. Fleming-Wood, if you could flip back
5 a couple of tabs to tab 16. Are you there?

6 A I believe so.

7 Q This is SoundExchange Exhibit 2239.

8 This is the e-mail that had forwarded that
9 Competitive Intelligence Report that we looked at.

10 The e-mail is from Ashley Hennings. She
11 works in your group, right?

12 A She does.

13 Q It's to the executive leadership team at
14 Pandora, correct?

15 A Yes, it appears to be.

16 Q And that's you. You're a part of the
17 executive leadership team, right?

18 A I am.

19 MR. KLAUS: We move the admission of
20 Exhibit 2239, Your Honor.

21 MR. LARSON: No objection.

22 CHIEF JUDGE BARNETT: 2239 is admitted.

23 (SoundExchange Exhibit 2239 was
24 admitted into evidence.)

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1 BY MR. KLAUS:

2 Q And one of the things that Ms. Hennings
3 says, she says "In Will's absence," that she
4 "wanted to share the attached documents that our
5 team has been developing and updating each
6 quarter."

7 The "Will," that's a reference to
8 Mr. Valentine of your staff, correct?

9 A It is.

10 Q Where she forwards a number of
11 documents, one of them is what's called "Fast
12 facts approved by public metrics." Do you see
13 that?

14 A I do.

15 Q That would be what is behind tab 17,
16 SoundExchange Exhibit 2240?

17 A Yes.

18 Q Is that the fast facts public metrics
19 document that Ms. Hennings was talking about?

20 A I believe it is.

21 Q Another document that's developed and
22 updated by your team each quarter?

23 A That's correct.

24 MR. KLAUS: We move the admission of
25 Exhibit 2240, Your Honor.

1 MR. LARSON: No objection.

2 CHIEF JUDGE BARNETT: 2240 is admitted.

3 (SoundExchange Exhibit 2240 was
4 admitted into evidence.)

5 BY MR. KLAUS:

6 Q One of the things you mentioned during
7 your examination by Mr. Larson was that Pandora
8 was trying to make a big move to the car, right?

9 A Correct.

10 Q And you know that Spotify is also trying
11 to integrate with carmakers as well, correct?

12 A I am aware of that.

13 Q Now, I would like to turn,
14 Mr. Fleming-Wood, to the subject of your
15 responsibilities as the head of marketing for
16 Pandora.

17 One of the things that you're
18 responsible for is something that you call growth
19 marketing, right?

20 A Yes.

21 Q And that's trying to expand your
22 audience and reach, correct?

23 A Yes.

24 Q And you're also responsible for what you
25 call brand marketing, right?

1 A I am.

2 Q And brand marketing refers to how the
3 consuming public, actual potential consumers
4 perceive the Pandora brand, right?

5 A In part.

6 Q And the person who runs that group for
7 you, her name is Melissa Waters, right?

8 A Yes.

9 Q And it's important to you what actual
10 and potential consumers think when they think of
11 Pandora, right?

12 A Certainly.

13 Q Because it's important to you that your
14 current active users, the 80 million of them,
15 think positively about the experience that they're
16 having on your site, right?

17 A That would be the goal.

18 Q Because you don't want to lose those
19 users, do you?

20 A Of course not.

21 Q You also think it's important what
22 prospective users, the people who haven't started
23 using the service, may think of when they think of
24 Pandora.

25 That's also an objective of marketing,

1 right?

2 A Yes.

3 Q If you could turn to tab 21. This is a
4 document, SoundExchange Exhibit 2356. First of
5 all, this was -- this was a document that was
6 created by Ms. Waters in your department, right?

7 A I believe so, yes.

8 MR. KLAUS: We move the admission of
9 Exhibit 2356, Your Honor.

10 MR. LARSON: Objection. Lack of
11 foundation.

12 CHIEF JUDGE BARNETT: Overruled. 2356
13 is admitted.

14 (SoundExchange Exhibit 2356 was
15 admitted into evidence.)

16 MR. KLAUS: At this point, Your Honor,
17 I'm going to start going into the substance of the
18 document, which has been designated restricted, so
19 I think we do need to move into closed session.

20 CHIEF JUDGE BARNETT: Okay. Anyone in
21 the hearing room who has not signed the
22 nondisclosure certificate, please wait outside the
23 courtroom -- or the hearing room.

24 MR. LARSON: I assume it's okay if
25 Pandora staff stays.

1 CHIEF JUDGE BARNETT: Except Pandora
2 staff may stay.

3 (THIS ENDS PUBLIC SESSION)

4 (RESTRICTED SESSION BOUND SEPARATELY)

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1 (THIS BEGINS PUBLIC SESSION)

2 Q Tab 13, this is Exhibit 1993 from the
3 Pandora blog. Is this something that your group
4 put out on the web about discovering more music
5 with personalized stations recommendations?

6 A I don't know if we wrote it, but we
7 certainly would have a say on what went on the
8 blog.

9 Q That is in or around this time frame in
10 2014, you rolled out more features related to
11 personalized station recommendations, correct?

12 A It appears so, yes.

13 MR. KLAUS: We would move the admission
14 of 1993, Your Honor.

15 MR. LARSON: No objection.

16 CHIEF JUDGE BARNETT: 1993 is admitted.

17 (SoundExchange Exhibit 1993 was
18 admitted into evidence.)

19 BY MR. KLAUS:

20 Q Then if you would take a look,
21 Mr. Fleming-Wood, behind tab 2, SoundExchange
22 Exhibit 404. This is another blog page talking
23 about the rollout of increased personalization
24 features, correct?

25 CHIEF JUDGE BARNETT: I'm sorry, if

1 these are blog pages, they can't be restricted,
2 can they?

3 MR. KLAUS: They're not restricted.
4 These are not restricted. This is the last page
5 I'll talk about that's public, Your Honor.

6 CHIEF JUDGE BARNETT: Oh, I thought we
7 were in restricted.

8 MR. KLAUS: We are in restricted. I
9 have no problem certainly, with this portion of
10 the transcript being -- and I can work with
11 Pandora's counsel to make sure that this portion
12 is designated public.

13 CHIEF JUDGE BARNETT: Okay, thank you.

14 MR. KLAUS: Thank you, Your Honor.

15 BY MR. KLAUS:

16 Q Mr. Fleming-Wood, let me see if I can
17 ask the question again. In or around January of
18 this year, it's a fact that Pandora rolled out
19 additional personalization features for its mobile
20 and Android listeners, correct?

21 A This is a new UI for the app that's
22 announced in the second bullet post, so this is
23 just an updated UI for the app. So, yes, we
24 introduced that and talking more about
25 personalization, but it was a redesign of the user

1 interface which we do from time to time.

2 MR. KLAUS: We move the admission of
3 Exhibit 404.

4 MR. LARSON: No objection.

5 CHIEF JUDGE BARNETT: 404, I'm sorry,
6 which tab was that?

7 MR. KLAUS: It was tab 2, SoundExchange
8 Exhibit 404.

9 CHIEF JUDGE BARNETT: Thank you. I was
10 on the last one.

11 Exhibit 404 is admitted.

12 (SoundExchange Exhibit 404 was
13 admitted into evidence.)

14 (THIS ENDS PUBLIC SESSION)

15 (RESTRICTED SESSION BOUND SEPARATELY)

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23 (THIS ENDS RESTRICTED SESSION)

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1 (THIS BEGINS PUBLIC SESSION)

2 CHIEF JUDGE BARNETT: Mr. Miller, you
3 are on your feet.

4 MR. MILLER: I am, Your Honor. We have
5 the next witness so ...

6 CHIEF JUDGE BARNETT: All right. Who
7 would that be?

8 MR. MILLER: Mr. David Pakman.

9 - - -

10 DAVID PAKMAN,
11 having been duly sworn, testified as follows:

12 MR. MILLER: May I proceed?

13 CHIEF JUDGE BARNETT: Yes.

14 DIRECT EXAMINATION BY COUNSEL FOR iHEARTMEDIA
15 BY MR. MILLER:

16 Q Good afternoon, Mr. Pakman.

17 A Good afternoon.

18 Q Mr. Pakman, where are you currently
19 employed?

20 A I'm a partner at Venrock.

21 Q What is Venrock?

22 A Venrock is a venture capital firm. It's
23 one of the oldest capital venture firms that was
24 established in the late 1930s by Laurance
25 Rockefeller. Venrock is actually a compound word

1 combining "venture" and "Rockefeller." We invest
2 in early-stage technology in healthcare companies
3 and try to grow them into big successful
4 companies.

5 Q Can you give us some examples of some of
6 the companies Venrock has invested in.

7 A Yes, over the more than 40 years, we've
8 invested in companies like Apple, Intel, and
9 companies like Cerna Pharmaceuticals and Check
10 Point and DoubleClick.

11 Q How long have you worked at Venrock?

12 A I will have been there seven years this
13 November.

14 Q While at Venrock, do you have any
15 personal experience with digital music companies?

16 A Given my background as an entrepreneur
17 and executive in digital music, I am the point
18 person at Venrock for reviewing business plans or
19 investment opportunities from start-up seeking
20 investment. Over my almost seven years there,
21 I've reviewed scores maybe every year of companies
22 in digital music.

23 Q Can you describe briefly what some of
24 your review of those companies involves?

25 A Yes, when I review any potential

1 investment, we meet with the -- often meet with
2 the teams, review the P&Ls and investment plans,
3 look at the business plan, make an assessment of
4 the market, look at some other materials, maybe
5 some research to try to figure out whether there's
6 a good opportunity for investment.

7 Q You mentioned a moment ago that you had
8 some background before Venrock. Did you have any
9 experience in digital music before you came to
10 Venrock?

11 CHIEF JUDGE BARNETT: Excuse me,
12 Mr. Miller, should we open the hearing room?

13 MR. MILLER: I think we'll be in public
14 session for the whole time.

15 CHIEF JUDGE BARNETT: Okay. Thank you.

16 BY MR. MILLER:

17 Q I was asking about your background prior
18 to Venrock.

19 A Yes, before Venrock, I started my career
20 at Apple where I was the co-creator of Apple's
21 early efforts in music, the Apple music group.
22 After that, I was an entrepreneur three different
23 times, helping build or founding or running three
24 different digital music companies.

25 Q Can you identify a couple of digital

1 companies and what they did?

2 A Sure. One of them was a company called
3 MyPlay. I was the co-founder of that and its
4 president. That was a digital music locker
5 company. It was also one of the very first
6 commercial webcasters, operated a webcasting
7 service. I also was the CEO of eMusic, one of the
8 largest independent retailers of digital music,
9 where I negotiated thousands of royalty agreements
10 with record labels, music publishers and
11 performing rights societies, and built and
12 launched a service that was in use by millions of
13 consumers.

14 Q Shifting gears a little, have you ever
15 testified before related to digital music or
16 licensing?

17 A I have. I was an expert witness in the
18 first CARP rate-setting hearing related to
19 Internet webcasting, and I also testified in front
20 of Congress on some proposed legislation around
21 Internet radio.

22 MR. MILLER: Your Honor, we offer
23 Mr. Pakman as an expert in investment in the
24 digital music industry.

25 MR. KLAUS: I would certainly have no

1 objection to Mr. Pakman as an expert on the
2 subject of venture capital investment, which I
3 think is the only thing that the examination so
4 far has provided a foundation for. On the subject
5 of investment more broadly, I don't think he's
6 qualified as an expert on that subject.

7 MR. MILLER: Your Honor, he testified,
8 we can have him testify more about he's got
9 experience both as an investor, as a venture
10 capitalist, but also within the digital music
11 industry itself.

12 CHIEF JUDGE BARNETT: You'll need to lay
13 a little more foundation for that broader
14 definition of investment. Certainly he is
15 qualified as a venture capital and investment
16 professional in the industry, but if you would --
17 if you want a broader qualification, you need to
18 establish it.

19 MR. MILLER: Sure.

20 BY MR. MILLER:

21 Q In reviewing financials or in reviewing
22 companies, can you describe some of the principles
23 that you applied to review digital music companies
24 more generally.

25 A Yes. Typically in evaluating whether an

1 investment opportunity is attractive, we'll look
2 at the economic structure of a company, what are
3 its likely revenues, what are its gross margins,
4 what are its chance for profit, how large is the
5 market, is the market growing, how challenging is
6 it to bring the product to market, are there
7 certain impediments to bringing -- making the
8 company successful.

9 Prior to running music, I was a partner
10 at a private equity firm called Dimensional
11 Associates. It's a little bit different than
12 venture capital. There we were taking control
13 positions. We were purchasing stand-alone
14 companies. In that case, I had to evaluate
15 whether we wanted to be an entire owner of a
16 company and run it ourselves, a little bit
17 different job than venture capital, but also in
18 the field of investing in digital music.

19 Q Do you do anything in your job to follow
20 the digital music industry and the economics of
21 it?

22 A Yes, given that I spent almost 15 years
23 as an entrepreneur in it, it's an industry that's
24 near and dear to my heart. I love music. So I
25 have stayed very close to it. I read research

1 reports and talk to fellow venture capitalists and
2 entrepreneurs about this case in hopes of turning
3 that expertise into a chance to invest in a
4 company to can grow and be successful.

5 MR. MILLER: We would offer him based on
6 the additional testimony he's given as an expert
7 in the economics of the music industry --
8 investment in the economics of the investment --
9 in the music industry.

10 MR. KLAUS: It would be the same
11 objection, Your Honor. I think what Mr. Pakman
12 has testified to is his experience and his breadth
13 of experience and discussions with people in the
14 venture capitalist space. Again, no objection to
15 him being qualified to talk about that. But in
16 terms of what sort of broader investments are made
17 in digital music, I don't think he's been
18 established as an expert.

19 CHIEF JUDGE BARNETT: I heard testimony
20 about investment as in taking an ownership
21 interest. That's not the same as a venture
22 capital owner. Overruled. Mr. Pakman is so
23 qualified.

24 MR. MILLER: Thank you, Your Honor.

25

1 BY MR. MILLER:

2 Q I should have mentioned we placed a
3 binder in front of you, Mr. Pakman, as well as the
4 court. If I could ask you to turn to the first
5 tab of that binder. Do you recognize that
6 document?

7 A I do.

8 Q What is it?

9 A This is my direct testimony.

10 MR. MILLER: Your Honor, we move into
11 evidence what I think is identified as IHM Exhibit
12 3216.

13 MR. KLAUS: No objection.

14 CHIEF JUDGE BARNETT: 3216 is admitted.

15 (IHM Exhibit 3216 was admitted into
16 evidence.)

17 BY MR. MILLER:

18 Q Mr. Pakman, do we have a demonstrative
19 that also summarizes your testimony in your
20 written direct?

21 A Yes, I believe you do.

22 Q Can we put that up on the screen.

23 Do you intend to cover all the details
24 of your opinions today?

25 A No.

1 Q On this demonstrative you used the term,
2 so we use the same terminology, the term
3 "webcaster." What do you mean by the term
4 "webcaster" here?

5 A I define a webcaster as a service that
6 avails themselves of the statutory license and
7 operates a webcasting service. I use also the
8 term "stand-alone webcaster" here. I mean that to
9 mean a company whose primary or exclusive business
10 is operating a webcasting service as opposed to
11 additional businesses like selling of phones or
12 providing software to listeners.

13 Q In your experience in the digital music
14 industry or investment, are you aware of any
15 profitable webcasters?

16 A No, I've never seen or met with or
17 reviewed a single company in webcasting as
18 profitable.

19 Q What is the basis for your experience to
20 say that there are no profitable webcasters?

21 A Well, one, I operated a webcaster
22 originally. Two, as part of my job as a venture
23 capitalist, as I mentioned earlier, I met with
24 scores of companies and evaluated their prospects
25 of being profitable. None of them were

1 profitable. And to my knowledge, none of them
2 have achieved profitability.

3 Q In your experience, what's the reason or
4 the most significant reason for the lack of any
5 profitable webcasters?

6 A Well, the highest cost, the largest cost
7 that any webcaster faces are the sound recording
8 royalties. So their ability to be profitable or
9 not is a direct result of the royalties they pay.
10 In fact, we can look at this as gross margin. The
11 higher royalties they pay, the lower their gross
12 margin. Lower gross margin companies have a
13 harder time becoming profitable. So in this
14 example, lower royalties would mean higher gross
15 margins and would offer a company a higher chance
16 of being profitable.

17 Q Do you understand that there have been
18 witnesses on the other side who filed testimony in
19 response to your opinions?

20 A Yes.

21 Q Have you read the testimony of Professor
22 Lys responding to you?

23 A I have.

24 Q And are you aware that he claims that,
25 for instance, Pandora's recent performance in the

6217

1 fourth quarter of 2014 demonstrates that, in fact,
2 webcasters can be profitable?

3 A Yes, I've read that.

4 Q Do you have a response?

5 A To the best of my knowledge, Pandora has
6 never been profitable on an annual basis up until,
7 I believe, Q4 of last year, that would have been
8 the first quarter they ever turned a profit. That
9 profit was a small profit. It was 12 million
10 dollars. But I see already that in Q1 of this
11 year, they have flipped back to being
12 unprofitable. In fact, I believe their loss was
13 48 million dollars, four times the profit in Q4 of
14 last year.

15 And the research reports I read by
16 public market stock analysts, none of them, those
17 analysts that I read, believe that Pandora will
18 ever be profitable on an annual basis. So
19 Professor Lys's pointing out they achieved one
20 profitable quarter doesn't change my point of
21 view.

22 In addition, Pandora is a company that
23 pays rates lower than the commercial CRB rates.
24 In the event that their rates were to raise, I
25 think that would have an impact on their ability

1 to be profitable. So I don't have hopes for that
2 company to be profitable from everything that I
3 see.

4 Q What is your understanding of the rates
5 as compared -- that Pandora pays as compared to
6 the CRB rates?

7 A I believe their rates are about 50 or 60
8 percent that of the commercial CRB rates.

9 Q To your knowledge, has anyone in the
10 case suggested that a webcaster has managed to
11 make a profit at the roughly double CRB rates?

12 A No, I haven't seen anyone make that
13 statement.

14 Q You talked a good deal in your testimony
15 about gross margins and you mentioned it earlier,
16 but have you read Professor Lys' testimony that
17 Pandora's gross margin is higher than the margin
18 for some of the companies that you would deem
19 successful?

20 A Yes, I read that.

21 Q What would you say in response to that?

22 A Well, first of all, I believe Pandora's
23 margins vary quite a bit over the years quarter to
24 quarter. So some margins -- some quarters, their
25 margins -- gross margins are lower than other

1 quarters. In addition I think that what matters
2 really here is whether the company can ever be
3 profitable. Professor Lys, I believe, pointed out
4 a company or two that has achieved profitability
5 but has gross margin similar to Pandora's. I
6 think my point is the lower the gross margins, the
7 less likelihood that you can be profitable. And
8 the fact that Pandora's had varied, some quarters
9 good -- some quarters higher, some quarters lower,
10 hasn't had any bearing on their ability to turn
11 profit on an annual basis.

12 Q Professor Lys also asserts that
13 short-term profitability is not an adequate
14 measure of success in this nascent industry
15 because firms might be trying to refine their
16 business models or achieve critical mass. Have
17 you seen that?

18 A Yes, I've seen that.

19 Q Do you agree with that assertion?

20 A I don't. I don't agree, no.

21 Q Why not?

22 A Well, first of all, I think webcasting
23 is not an nascent industry. It's an industry
24 that's been around 14, 15, 16 years. One would
25 expect, particularly when you're looking to

1 determine whether an industry is predictive of
2 success, is it likely to be able to produce
3 positive investment outcomes for investors, that
4 you would see some evidence of profitability. We
5 would see some of the hundreds of companies who
6 have become webcasters over the years that they've
7 been able to achieve profitability. Yet we can't
8 find a single one that's profitable. So I don't
9 think there is strong evidence that we're going to
10 find that, first of all.

11 Second, I think that Professor Lys
12 suggested, I think the strategy that Pandora's
13 applying is one of foregoing profits in exchange
14 for growth. So if that were true, then I guess we
15 would expect that since no companies are
16 profitable in webcasting but they must all be
17 employing the strategy and that none of them are
18 attempting to be profitable. But that would mean
19 one of two things that would need to be true then,
20 that everyone would be big. That's not the case.
21 We have hundreds of very small webcasters who are
22 unprofitable. We've got a couple big ones and
23 they're unprofitable.

24 But it would also then have to be true
25 that Pandora, whose now growth has slowed compared

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1 to what it's been over the previous years, maybe
2 then they would be profitable now, but even they're
3 not. So I don't believe that it's an accurate
4 assessment to say that every webcaster is
5 foregoing profit.

6 Q Have you seen any examples of companies
7 who were pursuing a different business model or
8 strategy than Pandora who are profitable?

9 A No, I have not.

10 Q I'll turn to a slightly different topic.

11 Did you offer some opinions in your
12 written testimony about the lack of meaningful
13 entry into the webcasting industry?

14 A Yes.

15 Q Is that discussed in more detail in your
16 report?

17 A Yes, I set that forth in my written
18 direct testimony.

19 Q Can you summarize your opinion?

20 A Yes. So my testimony there discusses
21 that -- well, first, I think it's probably helpful
22 to say venture capitalists have a fixed amount of
23 money to invest. So we review investment
24 opportunities in many different sectors.

25 So what I did in my research was to

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1 compare the digital music sector, the number of
2 venture-backed companies that have been started
3 there with the many other sectors into which we
4 can invest our capital. The data there showed
5 that there is a very small number of
6 venture-backed digital music companies, webcasters
7 would be a subset of those, that have entered the
8 market over a period of 17 years or so, and yet
9 there are many other industries where there have
10 been literally orders of magnitude more
11 venture-backed companies that have entered the
12 space.

13 So the conclusion in my testimony is
14 that there's actually on a relative basis very few
15 venture-backed digital music companies, and,
16 again, webcasters would be a subset of those.

17 JUDGE STRICKLER: I wanted to ask,
18 excuse me, a question in that regard. If I
19 understand your testimony just now, you were
20 basically comparing the success and failure rates
21 in digital music that was financed by venture
22 capital, that's on page 13 in subparagraph (a) of
23 your written direct testimony, with what you have
24 in your comparative other market segments in
25 subparagraph (b), right?

1 THE WITNESS: Yes.

2 JUDGE STRICKLER: So going back to
3 subparagraph (a), you say there were 175 digital
4 music companies that were created and funded by
5 venture investors, right?

6 THE WITNESS: Yes.

7 JUDGE STRICKLER: Then you say, "Of
8 those approximately 33 percent were acquired by
9 larger companies."

10 THE WITNESS: Yes.

11 JUDGE STRICKLER: Are you categorizing
12 the 33 that were acquired by larger companies as
13 those who failed and exited or in some other way?

14 THE WITNESS: In the footnote below,
15 footnote number 32, I believe, I explained that
16 not all 33 of those were characterized as
17 successful outcomes because some of them were -- I
18 characterize them as either failed or a success.
19 So some portion of the 33 were successful, but not
20 all, because a few of them were acquired for less
21 money than their venture investors put in.

22 JUDGE STRICKLER: Is that the way we
23 should be measuring whether they're successful or
24 not, as to whether the investors received a return
25 on investment? If they're still in business, are

1 you saying that if the investors didn't get a
2 return, a positive return, that they should be --
3 I understand from your point of view they would be
4 deemed as failures. But from our point of views,
5 why should we deem them as failures if they're
6 still operating?

7 THE WITNESS: One of the reasons why I
8 think the data that I show in my testimony is what
9 it is, why there are so few digital music
10 companies backed by venture investors compared to
11 these other segments is because so few of them are
12 successful, as I think the data I prepared show
13 that digital music companies have a failure rate
14 two times as high as other sectors. And these
15 other sectors have a success rate, that is they're
16 likely to produce a profitable outcome for their
17 investors at least six or seven times more
18 frequently than digital music companies. So the
19 reason I think that's relevant to you is if that
20 continues, there will be less and less attractive
21 investment opportunities for investors, investors
22 won't fund digital music companies. There will be
23 fewer and fewer of them created, which I think can
24 lead to an unhealthy market.

25 JUDGE STRICKLER: Help me. I realize

1 it's in the footnote, but maybe you can give me
2 the snapshot because I'm trying to compare the
3 success and failure rates of paragraphs (a) and
4 (b). Of the 33 that were acquired by larger
5 companies, how many of those would you say were
6 successful by your measurement?

7 THE WITNESS: I said -- I have an
8 additional footnote. I believe it is 7, "Produced
9 profitable outcomes to their investors."

10 JUDGE STRICKLER: So the next sentence
11 where you say "of those who have exited," that's
12 making reference back to those 33? Or is that
13 just a coincidence?

14 THE WITNESS: Yes, the data showed that
15 36 companies had non-distressed exits, that means
16 they didn't go bankrupt. They were acquired. So
17 then I parsed to try to figure out how many of
18 those resulted in profitable exits for investors.
19 And here I say that I removed a few because they
20 weren't -- they did not exit. That was 33.
21 Then --

22 JUDGE STRICKLER: So those 33 are --

23 THE WITNESS: In the testimony, though,
24 in subparagraph (a) --

25 JUDGE STRICKLER: Right.

1 THE WITNESS: -- I list, of those who
2 have exited, only 7 achieved meaningful venture
3 returns for their investors.

4 JUDGE STRICKLER: Maybe I'm just missing
5 it, maybe it's late in the afternoon, but of the
6 33 that were acquired by larger companies, are you
7 saying that those 33 are part of the failures --

8 THE WITNESS: No.

9 JUDGE STRICKLER: -- or the successes?
10 Or they're split? If they're split, what's the
11 issue?

12 THE WITNESS: Seven of the 33 produced
13 meaningful returns for their investors. I list
14 them above.

15 JUDGE STRICKLER: Thank you.

16 THE WITNESS: Yes.

17 BY MR. MILLER:

18 Q Did you compare the success and failures
19 to other industries in your testimony?

20 A I did, yes.

21 Q How did those compare?

22 A As I just mentioned, the results show
23 that there are somewhere between ten times and 45
24 times the number of companies created in other
25 sectors I looked at, such as mobile, eCommerce, or

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1 SaaS compared to digital music, and that digital
2 music companies are twice as likely to fail than
3 these other sectors. The other sectors are six to
4 seven times more likely to produce a profitable
5 outcome for their investors.

6 Q Now, have you also reviewed the
7 testimony of Professor Lys responding to you and
8 discussing the entry by larger firms like Apple or
9 Google into the webcasting industry?

10 A Yes.

11 Q Does the entry of entities like that
12 change your opinions as to whether there's been
13 meaningful entry?

14 A Well, I look to see whether there's
15 opportunity for venture-backed investments to
16 occur. Obviously if all the entry in the market
17 is coming from companies that are already public,
18 there's no venture-backed opportunities to enter.
19 Also, I think those companies, you know, may be
20 pursuing investment or maybe pursuing investment
21 or activity in the space for different reasons
22 than what a venture investor is looking for.
23 We're looking to make a profitable return. So I
24 don't think the comparison is relevant.

25 Q Do you view the existence of entities

1 like Apple or Google in the market as a sign of a
2 healthy digital music market?

3 A No. I think, in fact, there's some
4 evidence that those companies operate music
5 services unprofitably and are content with
6 subsidizing the music service operations with
7 profits made elsewhere in their business, which I
8 view as a sign of an unhealthy market and
9 certainly something that would discourage further
10 entry by companies trying to make a profit.

11 Q Now, are you aware that Professor Lys
12 also characterizes the number of digital music
13 investments that you identified in your testimony
14 as being substantial and states that for those
15 paying the statutory rates, they must have
16 concluded that the royalties did not prevent them
17 -- prevent their chances of success?

18 A I'm aware of that.

19 Q Do you have a response that?

20 A Yes, first of all, the 175 that I
21 identified are digital music venture-backed
22 companies. They're not all webcasters.
23 Webcasters would be a subset of the 175. Of the
24 subset of the 175 who are webcasters, a further
25 subset of them would be the ones paying the

1 commercial CRB rates. There are some smaller
2 number of companies that we're talking about here
3 that are relevant to this discussion about
4 webcasters.

5 Q Do you view that subset as healthy
6 compared to other industries?

7 A Yes, the numbers show it's an extremely
8 small number. I mean, taken as a whole and
9 looking at venture activity around the United
10 States or around the world, it's literally orders
11 of magnitude, more capital are going into many,
12 many other tech sectors that are much more
13 vibrant, producing -- more entrepreneurs are
14 entering, more investment dollars are going in,
15 more exits are happening. They're a vibrant
16 industry. This is not one of those. In fact,
17 it's surprising how few companies we're talking
18 about here on a relative basis.

19 CHIEF JUDGE BARNETT: Sorry, could you
20 tell me what a digital music business would do if
21 it's not doing webcasting?

22 THE WITNESS: Sure, interactive service,
23 for example, interactive streaming service like
24 Spotify.

25 CHIEF JUDGE BARNETT: Okay. Would that

1 include reproduction of music?

2 THE WITNESS: Yes, like iTunes would
3 also be an interactive music service, whether it's
4 doing digital downloads. 175 is people who are in
5 the business of licensing music content and
6 somehow selling it or providing a service to
7 consumers.

8 CHIEF JUDGE BARNETT: Okay, I'm now
9 reminded your definition of webcasting is the
10 statutory license services.

11 THE WITNESS: Yes, a subset of the ones
12 that --

13 CHIEF JUDGE BARNETT: Thank you.

14 JUDGE FEDER: Would you include in your
15 definition of webcasting companies that are paying
16 the pureplay settlement rate as well?

17 THE WITNESS: They would be included in
18 -- for purposes of this discussion, I've said
19 webcasters are people availing themselves of the
20 statutory rate. But some subset of all people who
21 webcast pay the statutory rate and others pay on a
22 voluntary commission.

23 JUDGE FEDER: You're including that
24 whole group?

25 THE WITNESS: In the 175, yes.

1 JUDGE FEDER: Thank you.

2 BY MR. MILLER:

3 Q In addition to the response about the
4 overall numerical number of entries, Professor Lys
5 also notes to you in this -- is the reliance on
6 Dr. Blackburn that there's been investments of 2.4
7 billion dollars in the music industry. Do you
8 recall that?

9 A I recall his reference to that, yes.

10 Q Does that reference to that amount of
11 investment change any of your opinions?

12 A No, it doesn't, for a number of reasons.
13 One, the 2.4 billion number is not representative
14 of what we're discussing here. I believe if you
15 look closer at those numbers, of the 2.4 billion
16 of investments made into music and other
17 entertainment services, only, I think, 432 million
18 went into Internet radio, which also would be the
19 same superset of people paying statutory rate and
20 maybe not paying statutory rate. Of the 432
21 million, I believe 393 million went into Pandora,
22 so that was one company that received the
23 investment. I believe the other, the remaining
24 balance of the Internet radio went to three
25 companies. One of them, I believe, was TuneIn,

1 which received about 25 million dollars. To the
2 best of my knowledge, they're an aggregator of
3 other streams. They don't even pay royalties.
4 They wouldn't meet my definition of webcaster.

5 Another is Songza, which I believe
6 received an investment of about 4 and a half
7 million dollars. It was a very small webcaster
8 that was acquired by Google for 15 million dollars
9 which would not be considered a successful
10 venture-backed outcome.

11 Finally, I think the last company in
12 this 113 million was DeliRadio, I think. I
13 believe they also don't pay royalties. They
14 license promotional use of songs directly from
15 artists and small record labels.

16 Q I won't go through them all, Professor
17 Lys lists a number of other investment -- or,
18 excuse me, digital music companies in his
19 testimony. Have you seen that?

20 A I have, yes.

21 Q Do any of those change your opinions?

22 A They don't change my point of view
23 because, quite frankly, there are a lot of
24 different companies in there that aren't relevant
25 to this discussion. For instance, some were

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1 companies based in France that don't even operate
2 in the United States. Some of them have been shut
3 down. I don't know what rates some of them pay.
4 I don't know if they're voluntary. Many of them
5 were not webcasters. They were interactive music
6 services, operating under negotiated licenses. So
7 it didn't change my point of view about my
8 testimony.

9 Q You didn't list it in your testimony,
10 some specific examples of failed companies. Do
11 you recall that?

12 A Yes.

13 Q Was one of those Yahoo?

14 A Yes.

15 Q Are you aware --

16 A Just for clarity, Yahoo's music efforts,
17 not Yahoo as a whole.

18 Q Fair clarification.

19 Are you aware that Professor Lys
20 criticized you for some of the sources you cited
21 related to Yahoo?

22 A Yes.

23 Q Do you have a response to that?

24 A I do. Yahoo was in several different
25 segments of the digital music business and they

1 exited those segments three different times. In
2 2002 they exited their simulcast business. In
3 2007 they exited their Music Match, interactive
4 music product. In 2008 they exited their
5 webcasting business by selling it off to CBS.

6 So in the public reports, they made very
7 clear that they exited in, at least 2007 and 2008,
8 those businesses because of high royalty rates.
9 They were unable to earn a profit. I'm very
10 familiar with Yahoo's management decisions and
11 point of view, and their view is consistent
12 throughout operating all of these businesses that
13 a major, if not the primary, reason they exited
14 was because their rates were too high and they
15 were unable to earn a profit.

16 Q In light of the evidence that you've
17 seen, what is your view of the health of the music
18 -- digital music industry?

19 A I don't believe it's a healthy industry.
20 I don't believe it attracts significant amounts of
21 venture capital. I don't believe it attracts a
22 significant amount of entrepreneurs who are
23 willing to start companies, build them, owing to
24 high royalty rates. The high royalty rates are
25 stifling the companies' ability to turn profits.

1 They're making it impossible for companies to be
2 profitable. As a result, we see it as a very
3 unattractive segment into which to make
4 investments.

5 MR. MILLER: No further questions at
6 this time.

7 CHIEF JUDGE BARNETT: Thank you.

8 Mr. Klaus.

9 MR. KLAUS: Thank you, Your Honor.

10 CROSS-EXAMINATION BY COUNSEL FOR SOUNDEXCHANGE
11 BY MR. KLAUS:

12 Q Hi, Mr. Pakman. We haven't met. I'm
13 Kelly Klaus. I represent SoundExchange. I know
14 that we can't keep you over tonight, so let's try
15 our best to get this done in just, say, a couple
16 minutes.

17 A Thank you.

18 Q Mr. Pakman, just so we're clear, your
19 opinion is that venture capitalists don't like
20 investing in webcasters and other digital music
21 services, right?

22 A Relative to other industries.

23 Q Because those -- the economics of the
24 webcasting digital music service, those don't
25 allow venture capitalists to make venture returns,

1 right?

2 A The royalty rates that webcasters and
3 digital music companies pay don't allow them to
4 become profitable, and as a result, venture
5 investors are less likely to have a profitable
6 outcome on their investments.

7 Q And by profitable outcomes, you said
8 that Songza's acquisition by Google for 15 million
9 dollars on a 4 million dollar investment, your
10 view is that is not a successful venture-backed
11 outcome, right?

12 A By venture capitalist standards, that's
13 not a successful outcome.

14 Q At a return of more than 3 to 1, that's
15 not a successful outcome by venture capitalist
16 standards, right?

17 A It's less about the cash on cash return
18 rate and it's about the magnitude of the dollars.
19 So 10 million dollars of profit on 4.7 million
20 dollars of investment doesn't sustain the venture
21 capital model of many venture investors.

22 Q One of the reasons that you don't like
23 investing in digital music services is you don't
24 like investing in businesses that have to get
25 somebody else's permission to operate, correct?

1 A I believe that -- well, the primary
2 reason why I don't like investing in digital music
3 is because they can't be profitable. But I do
4 believe that negotiated voluntary licenses can
5 take a long time to get and can make operating a
6 business more difficult.

7 Q You don't like investing in the
8 businesses whose owners have to ask someone else
9 for permission to use their content; isn't that an
10 opinion you've expressed before?

11 A I believe that it makes it more
12 challenging to operate businesses.

13 Q Your view is that if people who are
14 entrepreneurs who want your VC money need to get
15 rights from someone else, that's too much of a
16 risk for you to take, right? That's an opinion
17 you expressed previously?

18 A I expressed an opinion that it's
19 riskier. I never said it was too much of a risk
20 to take.

21 Q Let's see. Did you speak at something
22 called the CoInvent Summit last December?

23 A I may have.

24 Q Could we take a quick look at what you
25 said there.

1 Mr. Nickels, if you could just play
2 that.

3 (Video played as follows:)

4 MR. PAKMAN: The last thing I'll say, I
5 think this is an important statement for
6 entrepreneurs, we invest in businesses that are
7 not permission-based businesses. What that means
8 to us is that you as the entrepreneur don't have
9 to ask someone else's permission for you to
10 succeed. Since we're backing great teams that are
11 going after really interesting products in big
12 markets, we want you to have the freedom to
13 operate. In license entertainment models, movies,
14 TV, music, you almost always can't bring your
15 product to market without going and getting the
16 rights holder's permission.

17 So in many cases the rights holder
18 controls your destiny. That's too much of a risk
19 for us to take because they're often not rational
20 actors, at least as it relates to your success.
21 So pretty much everyone else on the Internet, from
22 casual games to marketplaces, you don't need the
23 permission of an oligopoly to succeed. And I
24 would encourage entrepreneurs to look for the
25 rights base in non-permission because it's

1 unnecessarily harsh to attach your entire future
2 on the decisions of a couple highly paid
3 executives.

4 VOICE: Your advice is do not ask for
5 permission as for PMS?

6 MR. PAKMAN: Well, actually, my advice
7 is don't go into industries where you have to ask
8 permission. If you have to ask permission, then
9 the question is do you ask permission or do you
10 ask for -- beg for forgiveness. That's a
11 different strategic question. I'm telling you,
12 don't even get to the point that you ask yourself
13 that. Go into industries where you don't have
14 that.

15 (End of video.)

16 BY MR. KLAUS:

17 Q Mr. Pakman, while you say venture
18 capitalists aren't investing in the webcasting
19 digital music space, other entities are investing,
20 right?

21 A I'm not sure.

22 Q Well, let's take Apple, for example.
23 They bought Lala in 2009, correct?

24 A Yes.

25 Q That was something you wrote on your

1 blog, that you were shocked that they would do
2 that, right?

3 A Yes.

4 Q But they did it, correct?

5 A They did.

6 Q They developed and launched the iTunes
7 Radio service in 2013, correct?

8 A Yes, they did.

9 Q They bought Beats in 2014, correct?

10 A The headphone company.

11 Q The headphone and digital music company,
12 correct?

13 A I believe they bought the 99 percent of
14 headphone company, yes.

15 Q They paid 3 billion dollars for the
16 collective assets of that company, right?

17 A I think so, yes.

18 Q You've read news reports, I take it, in
19 following this space that Apple is preparing to
20 relaunch a Beats music service, right?

21 A Yes, I have read those.

22 Q And Google, Google has invested a
23 significant amount of money into the Google Play
24 service, correct?

25 A I don't know.

1 Q You're aware they have a streaming music
2 service, correct?

3 A I am.

4 Q Amazon also provides a streaming music
5 service, correct?

6 A Yes.

7 Q Those companies, they make -- they have
8 each made a decision that they're willing to do
9 business in this space because they think it's in
10 the best interest of their company, correct?

11 A I can't tell you the reasons why they
12 have decided to go into these spaces. I don't
13 know.

14 Q You're not privy to their
15 decision-making, correct?

16 A As a whole, no. I have isolated
17 examples of having spoken with a few different
18 executives at those companies, but I can't tell
19 you -- agree or disagree with your statement as to
20 why they have decided to go into them.

21 JUDGE STRICKLER: In your testimony,
22 though, in paragraph 28, don't you say that one of
23 the reasons there have been sales to larger
24 companies is "that they're willing to subsidize
25 the poor economics in order to make profit

1 elsewhere on other related businesses?"

2 THE WITNESS: Yes, and I believe that's
3 one reason why they enter these spaces, but in
4 answering that question, I don't think I could
5 generally say yes, that I know why they're going
6 into these spaces. I think that's a plausible
7 reason for why many do enter the space.

8 JUDGE STRICKLER: You refer to it as
9 subsidizing the poor economics, but another spin
10 on that certainly would be that they're willing to
11 invest in the noninteractive space, right, in
12 order to get greater returns on other lines of
13 business that they have so it becomes a net
14 positive return on investment or so they would
15 project, which is why they go into it. Isn't that
16 just another form of investment?

17 THE WITNESS: I believe that their
18 willingness to operate unprofitable businesses is
19 because it provides them some benefit in some
20 other part of their company for sure. I don't
21 know that the reason they're willing to invest in
22 the digital music business is because they believe
23 the digital music business themselves will be
24 profitable someday. I don't think there's clear
25 evidence of that.

1 JUDGE STRICKLER: Thank you.

2 BY MR. KLAUS:

3 Q Let's go beyond the
4 Apple/Google/Amazons. Spotify, you're aware they
5 recently raised 400 million dollars in funding?

6 A Yes.

7 Q And Goldman Sachs participated in that
8 investment round; you're aware of that, right?

9 A Yes.

10 Q The Abu Dhabi Sovereign Wealth Fund
11 participated in that 400 million dollar offering,
12 right?

13 A I don't know. If you say so.

14 Q Have you read reports that they did?

15 A I just don't recall who all their
16 investors were in the last round.

17 Q And iHeart, the same company that's
18 hired you to testify here, they bought the thumb
19 play music service in 2011, correct?

20 A Yes.

21 Q They've developed and launched the
22 iHeartRadio custom radio offering, right?

23 A Yes.

24 Q They've made a business decision to run
25 iHeartRadio, custom radio without ads, correct?

1 A I can't say for sure. I honestly don't
2 know.

3 Q But they -- obviously they made a
4 decision that it's in the best interest of their
5 company to pursue this business, right?

6 A I think there's a -- you know, you can
7 find several examples of companies willing to
8 invest in the space. What I think you can't find
9 is examples of hundreds of thousands of companies
10 entering. You can't find evidence of venture
11 capitalists investing significant money in the
12 space compared to other industries.

13 So I think you're -- by picking one or
14 two or three examples, you're finding exceptions
15 that prove the rule, that there is a very limited
16 amount of investment made by venture capitalists
17 and that's the three or four giants you can name
18 who invest in the space do so for reasons other
19 than finding a reason for profit.

20 JUDGE STRICKLER: Mr. Pakman, a question
21 for you. Do you think that Pandora's large market
22 share in the noninteractive space makes it a
23 potentially good acquisition target for some of
24 these larger players?

25 THE WITNESS: I don't know. I believe

1 that market share for some of these companies,
2 like Apple and Google, is important because they
3 are trying to maximize consumer attention on their
4 devices. And I believe that Pandora has created
5 value by being -- value potentially to some
6 acquirer by being large, but I think they've also
7 made their business -- their business is
8 unattractive because it seems spreadingly unable
9 to be profitable.

10 JUDGE STRICKLER: Unable to be
11 profitable, and that's the example of the poor
12 economics that you say exist given the royalty
13 rate structure?

14 THE WITNESS: Yes. I mean, they pay
15 rates less than the commercial CRB. They can't be
16 profitable -- have not been able to be profitable
17 under those rates and rates continue to go up and
18 so their prospects for profitability seem
19 unlikely.

20 JUDGE STRICKLER: But other large
21 companies have acquired noninteractive and other
22 streaming services despite the fact they're not
23 making any money. So is it your testimony that
24 Pandora's lack of profitability is unusual in that
25 it makes Pandora not a good acquisition target?

1 THE WITNESS: I think it would be hard
2 to argue with the fact that profitable companies
3 are more appetizing acquisition targets than
4 nonprofitable ones. But the fact that
5 unprofitable ones get bought doesn't mean that
6 unprofitable ones have no appeal to books, right?

7 JUDGE STRICKLER: More profitable ones,
8 you have to pay more of a premium for, right?

9 THE WITNESS: Perhaps, yes, I would
10 think so.

11 JUDGE STRICKLER: So unprofitable means
12 that you can buy it at a relative bargain if you
13 can create synergies in your own business because
14 you have other larger businesses --

15 THE WITNESS: I can think of big
16 premiums who pay for unprofitable companies from
17 time to time, too. So I can't draw the exact same
18 point that you're making. But I certainly do
19 believe that there are examples, really in the 20,
20 30, 40 range, I think 33, of companies that get
21 bought in this space. But on a relative basis,
22 compared to mobile or social networking or
23 eCommerce or enterprise SAS, they're dwarfed by
24 literally one or two orders of magnitude.

25 So I think the fact that we could find a

1 few examples of two companies that got bought is
2 not indicative that it's healthy, and I think,
3 furthermore, it proves my point, that this is not
4 a fertile industry that attracts venture capital
5 investment in the same way that so many others do.
6 And the reason I think that's relevant is because
7 we as CVs make a choice every day where we're
8 going to invest, and we are drawn to investment
9 where there's a higher likelihood of success. As
10 long as rates are high, I think that makes this
11 industry less attractive.

12 JUDGE STRICKLER: Thank you.

13 CHIEF JUDGE BARNETT: Mr. Pakman, I
14 understand, in this struggling company, Pandora,
15 are the executives waiving their pay to make the
16 company appear more attractive, perhaps, or
17 profitable?

18 THE WITNESS: I honestly don't know.

19 BY MR. KLAUS:

20 Q Just to pick up on the Chief Judge's
21 question, the struggling company, Pandora, you're
22 aware they went public in 2011, correct?

23 A Yes.

24 Q They were one -- it was one of the
25 biggest paydays for venture capitalists in all of

1 2011, correct?

2 A I have not reviewed 2011's returns.

3 Q Well, are you aware that Labrador
4 Ventures, for example, that's a venture capital
5 firm you've heard of, right?

6 A I have, yes.

7 Q They participated in the
8 7.8-million-dollar round of financing and their
9 venture capital investment was worth 141 million
10 bucks on the day of Pandora's IPO. You're aware
11 of that?

12 A I'm not aware that that was their exact
13 number, but I'll take your word for it.

14 Q Crosslink Capital, you've heard of them?

15 A I have.

16 Q They participated in a 12-million-dollar
17 round of funding. Is it news to you that their
18 stake was worth 382 million dollars on the day of
19 Pandora's IPO?

20 A I didn't know that was their stake value
21 on the day of the IPO, no.

22 Q Any reason to doubt it?

23 A No.

24 Q Greylock Capital, you've heard of them,
25 right?

1 A I have, yes.

2 Q One of their partners is a member of
3 Pandora's Board of Directors, right?

4 A I didn't know if he still was, but I
5 know at one point he was.

6 Q Now, to be fair, they also had the good
7 success to invest in LinkedIn that year, but
8 cumulatively, between Pandora and LinkedIn, you're
9 aware that Greylock Capital's holdings were worth
10 more than 1.2 billion dollars as a result of
11 Pandora's IPO?

12 JUDGE STRICKLER: As a result of
13 Pandora's IPO or the combined IPO?

14 MR. KLAUS: The combined IPOs of Pandora
15 and LinkedIn. Thank you, Your Honor.

16 BY MR. KLAUS:

17 Q You're not aware of that?

18 A No, I was not.

19 Q Any reason to doubt that that's the
20 case?

21 A Thankfully you have the judge here to
22 correct you, so no.

23 Q Any reason to doubt it's the case as a
24 result of those two?

25 A No.

1 Q Okay, thanks.

2 The last question, the opinions that
3 you're expressing here before the judges in this
4 rate setting proceeding about venture capitalists
5 not liking the idea of investment in digital
6 music, this is an opinion you have taken
7 elsewhere, correct? You've stated this in many
8 different places.

9 A I have. I think my opinion has been
10 consistent over the course of the rates being what
11 they are, yes.

12 Q And one of the places that you do that
13 is on your blog, right, your disruption blog?

14 A Yes.

15 Q Another place you did it was before
16 Chairman Goodlatte's subcommittee in the House in
17 November of 2012, correct?

18 A Yes.

19 Q You brought opinions that were very
20 similar to the ones that you're expressing here to
21 that subcommittee, correct?

22 A Yes, I did.

23 Q You were testifying in that; that was
24 part of the Internet Radio Fairness Act, correct?

25 A Yes, it was.

1 Q It was trying to encourage Chairman
2 Goodlatte and members of the committee and
3 Congress in general to pass a law that would have
4 changed the standard that applies for rate setting
5 in this proceeding to one that controls in the
6 satellite proceeding, right?

7 A I was there to provide testimony on my
8 view of whether venture capitalists find Internet
9 radio a fertile area for investment, and I
10 concluded a similar point of view as I've
11 expressed here.

12 MR. KLAUS: No further questions, Your
13 Honors.

14 CHIEF JUDGE BARNETT: Thank you.
15 Anything further?

16 MR. MILLER: Nothing further.

17 CHIEF JUDGE BARNETT: Thank you,
18 Mr. Pakman. You may be excused.

19 (Witness excused.)

20 CHIEF JUDGE BARNETT: We will be at
21 recess until 9:00 in the morning.

22 MR. POMERANTZ: I'll give you our
23 witnesses.

24 JUDGE STRICKLER: You read my mind.

25 MR. POMERANTZ: So Captain Kass will

1 start, I think, tomorrow morning. Then we have
2 five witnesses who we are trying to finish -- we
3 have to finish by the end of the day Friday
4 because they're not available next week. In order
5 of when we'll call them, Professor Rubinfeld;
6 Mr. Barros, B-A-R-R-O-S, Concord Music; Mr. Kooker
7 from Sony; Professor Lys; and Ms. Butler. If we
8 have any time at the end of the day on Friday
9 after all of those witnesses, Mr. Van Arman will
10 be back as well.

11 JUDGE STRICKLER: Thank you.

12 CHIEF JUDGE BARNETT: Thank you.

13

14 (Thereupon, the proceeding was adjourned
15 at 4:17 p.m.)

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1 CERTIFICATE OF SHORTHAND REPORTER

2 I, Michele E. Eddy, Registered
3 Professional Reporter and Certified Realtime
4 Reporter, the court reporter before whom the
5 foregoing proceedings was taken, do hereby certify
6 that the foregoing transcript is a true and
7 correct record of the testimony given; that said
8 testimony was taken by me stenographically and
9 thereafter reduced to typewriting under my
10 supervision; and that I am neither counsel for,
11 related to, nor employed by any of the parties to
12 this case and have no interest, financial or
13 otherwise, in its outcome.

14

15 IN WITNESS WHEREOF, I have hereunto set
16 my hand and affixed my notarial seal this 28th day
17 of May, 2015.

18

19 My commission expires June 30, 2017

20

21

22

23 _____
MICHELE E. EDDY
24 NOTARY PUBLIC IN AND FOR
THE DISTRICT OF COLUMBIA

25

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